

<223> Clone ID: LIB190-070-Q1-E1-C10

<400> 3501

acatcagtgt tcgacttggc ggaagaagta ttgcacagtg aacaaacgtt tatgagagag 60
tgtatcactt gtttaggtca gggtagcgtt gtatgttcac cttgtgatgg cacgggtata 120
ttacaacaga acgaaacgga agagctttgt tgttattgta tgggtagaaa aatatctctt 180
tgtgcagact gtcagggaaa agggttgggc aaaacagagt tttaagggtg tttaaaaagg 240
agaataacaa tccttttggga atcggtaaac aatcgaaaac tcacaagtga cttttattac 300
aagggtgtcc attccttgtc agaaaagtat ttgtaagtaa tttgagggtta gcatcgattg 360
gcttcataag atgccatcat ttcagaattt tt 392

<210> 3502

<211> 380

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-C12

<400> 3502

actcctatat tagctagtgc ttatacgcat atagctaccg ataatatgct cgatgaactt 60
gatcgtttga atgttcctgc aataagaata ggaaagcctg tgcataatac tcgcgattta 120
tggaaatatt ctttggactc tattttggaa agagatgagc gagtcgtaga gaagagaacc 180
aattttaaga aagcagcaga aagacttgcg caaccgatgc gaggaaaagc aattggatta 240
gctcatcgag actattccaa atcacttggc caactagaac aagtagaaat gaatgtaacc 300
aaagagatac tcgagaaata tcctattgtg ttgagtactt gtgttggagc tggatgaagaa 360
tgtataaaga atatttcgtt 380

<210> 3503

<211> 389

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-070-Q1-E1-C3

<400> 3503

cttcggccaa gccttcggcc aagccttcgg ccaagccttc gcaatgaagg aaattaattg 60

gttacaaaag gaattaacgg aaaaaccttt aacctgtttc caattgatca tggttttatc 120
 ttaccagaca aatttcaaag ctatccttgg cctgtttgga tggactggcc tcaggtaaag 180
 gacccggttt gcgaagatgt anagagatat gcagaaacgc tagacngtga aatggacgct 240
 cgtctgatct tggacgaaac agatggcaga ctgtcaaaga atagcttaag aaatttgcg 300
 ataatgactg cgctttcttca gagagccatg gagaagaacc ttactctgta tgaaatccgt 360
 tcccttgat atgtccgcc tcccgcac 389

<210> 3504
 <211> 367
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-070-Q1-E1-C4

<400> 3504

aagggaaagg aaaggagaga aagaagaaag ggaataaatg caaagatctc caaagaaaag 60
 gaagaaagaa aagaaaggga gacacaatta atgaaggcaa aaagcataag gagttgaaac 120
 ggtaagaaa cccgttagtc caagcagtta aagaagaat gagtaagaaa aaaaggagtc 180
 attccaccaa ggggagtana ggcgcaagaa agaaaaccaa aacaattgaa cggaatcgga 240
 aaaaggggtg gatcacgtaa attaatccga taaaccgaga accttacctc tccaagaagg 300
 tgttgacgg ctgtcgaaag aacgtgctgt gaagtgcagag aacgtacgag aaagcaagt 360
 aggaaaa 367

<210> 3505
 <211> 378
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-C5

<400> 3505

agcagcacta ggaatacgag agataataat aataatagcg atcatagcaa tgaatgcaa 60
 caagtagttt taagtatatt acacaatgta ctgcagcaat tatcgtccag tctacctacg 120
 agactacctt tgtatgattg gtggatggaa tgggaatatt tttgcaagga aagaatgcaa 180

caaatacaac ttggcagagt aagagagacc gatcgtcata tacgtgaaca acgagttgtg 240
 caagtattga gaagaattca aggagaagag gatgaagtaa ctatcgatga aatagaaata 300
 cgagccaaga cagttgctcg tactatggat tattccgatt cttaatggtc cgatcatgga 360
 aataagaaga atagatca 378

<210> 3506
 <211> 283
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-070-Q1-E1-C8
 <400> 3506

cggggttgtt ttcttggttag cagttgtaca ttcaggatca tcaaagcca tacggatgaa 60
 agagagattc ttcatggaaa gaagccacat gtaaacctgc agcagcacat gctacatcga 120
 cgacagaaaa gtctggtccg gaagccaagt tgaagggaac tgggtgcatag aaacagtaac 180
 aagttgacta tgcattgtgca gtctgttat gttttgtgag ttctgtttga tagtttccag 240
 ctattctttt ggtagtgaat aaagagaaaa ttttttataa aat 283

<210> 3507
 <211> 306
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-070-Q1-E1-D1
 <400> 3507

atatctatgt acataaataa cttgtgtata cattagcttg aaacctggca aagtagtagt 60
 tgttttgcaa ggtaaatatg ccggtagaaa ggcggtgatc gtccaaaact acgacagtgg 120
 aacgcaagaa cgacctatg gccactgtgt gattgcaggc atcgacaaat atcctcgtaa 180
 agtgacccga aaaatgagtg agaaaaaggt gaagaggcgt tccaaagtcc gagcgttttt 240
 gcgcgtcgtc aactacaagc atattatgcc cacgcgatat acgttggact tggccgatgc 300
 actgaa 306

<210> 3508
 <211> 367
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-D12

<400> 3508

aaccaagcgt ctgcgaataa tgagatattt tgtttgtatt tattggcctg catcgaaaaa 60
gaaaatggca aatggaatat tgcgttgctg ttggcagaaa tggcaagaga tgaatgcatt 120
cgtatgcatt tggagtcgag tgcttttttg atccaacttc atctcctcat gacgaatatt 180
tatatgaagc tgagtcgttt cgacgaggca tatagctctc ttatgaatgt tgcggaatgt 240
atagaatcga gcaatgttgg ttatgatttg tccttgggta tcgagttgga tgccttgttg 300
ggaacgatca tgcaatggag atggaatgaa acattggcac aacaatgctt ggatagttta 360
agaagaa 367

<210> 3509

<211> 293

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-D3

<400> 3509

ccctgcctcc ggaattaaaa agggcaatcc cctttggttg gaacaaaaaa ccctaataccg 60
ggtacctgaa gccttaaacy taatggtgaa ccttgaaccc aaaccggtgg aaggtgattg 120
gaacggtect ggttgtcaaa caaacttttc aacaaagccg atgaaaaagg atggcggtta 180
caagaagtaa attttgccag tgatggaaaa gttaaaggca aaacataagg aacacatcat 240
tgcatatgga aagggaatg aaaagagact tacggggaaa catgaaacgg cat 293

<210> 3510

<211> 316

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-D4

<400> 3510

attggaattc caaaaattgg aaaaaattca accccaaaaa aattgggtat aaaaaatttt 60
ggaaatgaat tattacctga aggaactatt atatttagac ataaaggaaa aaggtgtatg 120

atccaggcaa agaattgacg cattaaataa gaaagtaaca catgcaaata ggtaaagcaa 180
acgggtgagt acagaggtgt gaaagagtgg aagaacatga aagcacagaa gaatgtaaga 240
aatggttaga gtacaaacca taaaggaagt aaaagcggga atctgagagg aggaaagcca 300
cattggaact gagaaa 316

<210> 3511
<211> 386
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-E1
<400> 3511

cacgcgtccg aaatagacgc tcaagcaata actattcgca tcaatacgat ttatcacgat 60
atgttccagt agtttgtgaa ataatggaag aacttttagt tcgaggccta tccaaggcca 120
gttatccttt tgtggttact gagtttggtc ctgacacttc gagtagcgat gatgaagacc 180
aagaacgagg cagatccagt aaaagtgtac gtcggaggtc tcgaagtggg agcatccgaa 240
gaagaagaag tgcaagtaga gattcatcag ccgagagagg aaatagcagg tccaataacg 300
gaagtgacaa tgagagttag cgctcttcgc gacttttcgc agaaaatagc aaaaagcgtc 360
cgtaattgt atttgttgct ggtggg 386

<210> 3512
<211> 411
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-E10
<400> 3512

agattagagg acaaaccctt tgctgctttt gtcggagttg gtacaaggat gggaaagcga 60
acgagaaagg tcggtatcgt tggaaagtat ggaacacggt atggcgcttc tataagaaaa 120
cagataaaga agatagaaat tgcccagcac gccaaatatt tgtgtgcttt ttgcggaag 180
gattccataa agagaaaggc ggttggtatt tgggtactgta aatcttgcaa cagatcaata 240
gcgggaggtg cgtggtctct gagcacccaa gcagcagcaa ccgtaagaag taccattcgt 300
cgtttgagag aaatgacaga atcgtaacgg agcaaatatt accaacttgg ctgtttgttc 360

gcaacttgca agtgaaactt gctgtttcct ttatcaataa gaataaagag a

411

<210> 3513
<211> 98
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-E12

<400> 3513

gagataagga aaatttcacc ttgaataatt tgggttgaac caacaacaac aacaacaaca 60
acagttacct caccaaaaat ttttcacaaa aaggtgta 98

<210> 3514
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-E2

<400> 3514

gaccacgct ccaccacgcg tccgaaggga aattgatttg gtaaggctcg cttcaaatga 60
gtctatcgag acgttattgc taaagacgtt tcctaaagaa atccctactt cgtattgtct 120
cgtgtatgca cttttggcta ttccagtact cgcgctcgac gtgtatttat atcttgccgt 180
actccacttg aactttattg cttcaagcgt ttcgttgatc atcgggtacta cagtcggcctt 240
gggtgcttcta gttacgtcgt atcataaaac tgcataatgcc aagtgggtcta agctcgatcg 300
cacaacagag caaccaacca agagctcttt caagggtaat ttgtcnggca tacgaagtgg 360
agttgagagt cacctatggc tcttggaag attctcggtc agttacagtg taatgataaa 420
caacgcaata 430

<210> 3515
<211> 355
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-E3

<400> 3515

cacgcgtcca cccaagcgtc cgggacattg tcgtacttgg taaatgaaaa ccaaaagcaa 60
aactgggtcaa acttgtgagt attgataatg aatTTTTTga agtagacaca agcattgtat 120
ccctttctga aacaataaaa aacgtcttgg aagacacgga ggatacagag agcattccct 180
tgcctaattgt ggaaggacga attcttgcaa aggttatcga gtattgtaga tatcactcac 240
tcttaaagac cattccgcag tctgaggagg atattgagcg ctgggatang gaattcctan 300
atgtagatca acaacccttt ttcatttgat tctggctgca aactatttgg atatc 355

<210> 3516
<211> 352
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-E7
<400> 3516

agttttggtt tattgaattg ggtatcaacg tgtttcaaac aatgtggtgg ttggttggag 60
caattgttgt atctgcaaaa aggctacaa gctctgtact agacgcttta aacattacta 120
aggatattaa tgctattgaa ggtctatctt ggatcaactt tgcttttagc ctattccttt 180
gtggaattgc aatagcagat ggtttgttgg ttggttcaag aagtgcaggc tcggggaaac 240
aaaatagtgg aaatagtaat aatgcgtgag ctgttgggta cttgtgaata gattattggt 300
tcatgttgtg cagaaaataa ttcgttggtt gttaaaaaga ttgtattggt gc 352

<210> 3517
<211> 376
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-F10
<400> 3517

ccacgcgtcc agctgacacg tgaagcttgc agtttccgag ataagatgac ggaatttaac 60
gaacttaatg cgaaagtttt cgggtgtgagt tcggacagtg tagagtctca caagtcgttt 120
gccgatgaac aaaagttgac gtttccctta ttatctgatg aaggcggtaa agtacgcaag 180
ctatacggtg taccaaagag catgtttatt atgcttggtc gctgcactta tgtcattggt 240
ccggatggta ttgtacgaca catctacaac agtcaagtag gtttcgcaaa ccacgtggag 300

gaggcaaaga aggcgttgga aaagatacga aacgacgctc aaacagcaga agagtgaaca 360
cactagactg ctttgt 376

<210> 3518
<211> 386
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-F12
<400> 3518

agttgcatga ctgggttact ataaattgca atatcacacg gtgcaaccgc tttatgaatt 60
gcatgttttt tgagatcaca caaacacttg tacactgaat gaacgacgta tgggtactaa 120
ctgtgcattt tgtatagata tcaacgatgt caaatatgtt aacaactacg atttcccgaa 180
tactatagaa gaccaagttc atcgattgg acgcactggt cgtgcagggtg cccttgga 240
gtcccatacg tttttcactc cggataaatt ccgtgttgcg aaacaattaa tgaacatgtt 300
gcgagaagct ggacaagaca ttcctcccgga tttggctcgt ttgataaaaa catcgtcctt 360
tggcggtaac aacagaaact tttctc 386

<210> 3519
<211> 404
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-F2
<400> 3519

acgcgtccag gaaaattgtg aaaagtttcc tggggcttcc caaaattcaa aggaacatga 60
acccaaatct gcaggaacgg tttgggtaag gtcacaaaa ttatcgatat tctagaagtg 120
tatcgtgata gtgcgcttgg tttgggtgat atctatttga gtggtgtag tcataatatg 180
caagaaatta tgaaaacgct gactattata agtaccatat ttattccact aacgtttatg 240
gctggtgat acggaatgaa tttccctcga atgccagaat tacattatgg atatggatat 300
actatctttt gggtgatggc acttgtcata gttgggcttg aaatatttat ttttcgcaaa 360
cgagggttga tangaagttg atgtatgctg cagatcgaat tgtc 404

<210> 3520
<211> 298
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-F3

<400> 3520

agnaaaaggt gtgaaagtaa ccaagttaaa accaataagg tgggaaaata acaatggatt 60
taaaacaact ccaatttaag gccttttaac ccaaaccctt tccttcctcc gcaaaacacg 120
gttgaaaagt caattagga actgaaaata gcaaggcggg ctctctcggg tccttttcca 180
atcaaggaat tgcgcgggaac gggtaaatca ctgcgcggaa agcagaagag gggggaatat 240
ttaagccaaa gtctgaagcc ggaaatattt agaggagact caacaagaac aactggat 298

<210> 3521
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-F4

<400> 3521

caagccttcc agtaatgcag gcaaagaatt gcccattaa ttcaaggatt accacatgca 60
attaggtaaa ccaaacggtt gattaaaaag gtgtgaaaga ttggaagacc atgaaagcac 120
agaagaatgt aagaaatggt taaagtaaaa accataaagg aagtaaaagc ggaaatccta 180
atgctggtgg ttatcctcca cctcctccac cttatgcaaa cgggtgcatat tatcctccac 240
ctcctcctaa tcaaggaaat atgccatttg gtggagtacg acgtatgtat ggggctcctc 300
ctcctccacc tcctctcctt tatgggtggg atctgagaat ggggtcaaaaa aagatatacct 360
ccttattaac atggaatact agtgtgtttt 390

<210> 3522
<211> 360
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-F5

<400> 3522

acggacgcgt ccgacaacat ccaacgaccc atgcccatt gttgtttact ggagctccac 60
aaggtcagtg ttttgtggtg tgggtacctc gttcctttgc catagcagta gcttcggcgt 120
atcgatttcc tatttatgtg agtcgcttgc tggtagaacg caatagcgtc taccctcgag 180
tggactgtag aggaaagtgg tatatcgcaa accaacctgc aatttgtaat ctacctcatc 240
tatctcgaaa tgcacctatt tggaagtatc gcatttcgga attggaaaga atggacacac 300
aacagttgta tgataccatg ataagatccg gtatctcttg tagtagagca aacacgcac 360

<210> 3523
<211> 378
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-F9
<400> 3523

agacggcgtc gaataagcaa ttgtggcgt agaacaatat gttgatacct aaaaagaacc 60
gaaacgcagt ttattctttt attttatcga gtggagtaat tgtggtgaag aaggacactc 120
atgccaaaaa acacttgcag cttgacgttc ctaatcttga agttatgaag atatgtcaga 180
gtcttacttc gcggggatat ttaaaggaac agttcagttg gggttacttt tattatactc 240
tgactgacaa cggaatcgat tacttacgtc gatatttgaa tcttctgtg gaaatagtcc 300
cggaaactct aaagaagcct actagacccc caggtgttcg ccttcgctg tttccatcag 360
aaagtcaaga aaagagag 378

<210> 3524
<211> 402
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-G10
<400> 3524

cccagcgtca aaagcanttg tgttcagtc ccttggtgaa tgtcagcaaa ataccgcaga 60
tacttgaaaa tcgacgcaat gaatctacag gagaactttc tcccatcacg ttgagtttcc 120
aattggcagg aaatatagct cgtgtattta caactctcgt tcagttacaa aatagatggt 180
atttggcaag tattttcatt tctcttgctt tgaatgccat tcttggcttt caatgtatgc 240

gttatcgatg taggcctcag tcgatgtcct ctttcaagga tcgcatctga gtgacacaca 300
ctcacacaac ttgacatgat tattcgcaat gtcatcgatt ctccaggaga atgataaatg 360
tatgtgtggt tgtgtgaaca atgcaatcta tcattatcg cc 402

<210> 3525
<211> 385
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-G11
<400> 3525

agtctttcan acagacgttg gggtaactcc aaggccaatt caattttaac aaaatccaag 60
aacttttttg gcaatccaag gacaaaattc aagttcccgg gcaaggaaag ctttttccaa 120
cccggaacta acctcaagga acaagaaggg caacgccggt ccaacggcgg tagcaagttt 180
ccttgaacac anggacaaat ccgtttaana taaacctttt gggaagagaa tgaataattt 240
cggttgaagc aaggaaactt ttgttttcta cgctgttatc atgtgcactc ttgaacctcc 300
ttatgttctt tttctagaat tggagacaag cgggtttatt ttccgttgac agctttactg 360
gaacaactgg aatttgattt ttcca 385

<210> 3526
<211> 197
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-G12
<400> 3526

agcaganctg aagcgacatt ccaaagtcc tcaaggggtg tcaaccaagc caaaggatga 60
attgcaagtt aagttaacct ttgggtttgc cttaaaagga ttaaggttta atcccaagtt 120
actttggcaa tataattcaa tggaagccaa aaataaacct gtgtcacggt aatgaattag 180
cgccaataat ggtaatg 197

<210> 3527
<211> 248

<212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-070-Q1-E1-G2

 <400> 3527

 acgcgtccaa gtaataacag tataattcag ttataaatca agggaatggt aaaggcaatt 60
 taatccataa ttgcggaagg aatattacac ccaaggatgg aaaaccagga tataaggaat 120
 ttggaaggag gtaggatgaa tgtgagtaaa atgggagtaa taataggag tatgggaata 180
 atgggaatag aatacagtag cgtataagaa catgaggaag aaagaggcan atacgggaaa 240
 gcagtana 248

<210> 3528
 <211> 326
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-070-Q1-E1-G3

 <400> 3528

 aaccacgcgt ccggaaaaaa ggcaaatacg gaaaagcatt aaaagaagaa agagaaagga 60
 aaaaactgat taccaggaaa aaaaaaggga tttaatgagg aaagaaagat caaggaagta 120
 agagtaagag aaggagtaat gtgaatgaaa gcaggaaagt atttgaagaa gaaattgtaa 180
 agcgcgtacc ttttgcataa tgtcccaccg attgaaagag gaacaaaaaa gaaagaaaaa 240
 gaagtacca ggtaagaccc gaagctagtt gatcttatgc tgtccaaccg aattaaggct 300
 gaaccagtac ctgtggaaaa agattt 326

<210> 3529
 <211> 412
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-070-Q1-E1-G4

 <400> 3529

 ggtgtggact ccttgacagt acaagataaa gggaccttgg agaacgcact aagtccaaa 60
 aaagattaac ttccttaaag aaaagttgag tttccaaata atgccgatga ccaagttaaa 120

attggccaag gggaaaaacc taacaacttt ccatctcgga aaaaccggcc gggaaccttt 180
gctccagatt tggtncaaaa atacgggacc agtcatgtgt tgttacaagg ttgcaagct 240
tcagtttaaa aaagtgggga ctacaaacaa aggtggaaca atgggggtcag tactatgggc 300
ttaagaatac ttttatcaag ttacatcgca aactgttttg ttggatagac gaatggtatg 360
gacttacagt ggaagatatc agaagggatg aagatgaaac acaaaagttg ac 412

<210> 3530
<211> 367
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-070-Q1-E1-G9
<400> 3530

acccacgcgt ccggagtaca tgtaggaatg tcatgggttag ggataagtag tgtaataata 60
atgggaataa tgggaatgat aaatgtggta agtaggtcat ataaaagcat ggagtatatg 120
gagaggataa gagaagagag taggggtgtat gtacgaatga gtataataac aggaatgata 180
tggagtaaag aagtgtgggg atcatggtgg ataaatgatg taaggaatat aagcatgtta 240
gtatgctgga tatggttga agtaatagga ggagtaaaga aggagtacag aggaataata 300
agcagtatag gaataataaa tataccgata ataaagtact cagtagagtg gtggaatacc 360
ttgcatc 367

<210> 3531
<211> 105
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-070-Q1-E1-H10
<400> 3531

gtccgatgac tcttcccatc atcatcattg aaaagtattg tattgcagca aactacttaa 60
atTTTTgtta naaaaaaaaac tgcaaggatg ttgcttaatt ttctc 105

<210> 3532
<211> 325
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-H12

<400> 3532

gtcctagtagc aatccaaggc ctttgccctt ccttggccaa ccaatccttt caatccgttt 60
agtacttttg aaaaagggtt acaaaattgt aactgttgca aataatttga acgaaaaaaa 120
ggactgcgac tggtaggttc cttccaaagt gcgcggaagt ggacttcgtt gcaagggttg 180
ttatgtcgct atagaagtga cagcgttgtg gagggaggga aaaagcaaaa gggagtcgct 240
actgaaagaa gtcctgtttc tacagccatt cccatgggtt atgccgatga atatttccat 300
cacgtgcaac gttggcgtcc aggag 325

<210> 3533

<211> 374

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-H2

<400> 3533

acgcgtccat caattgttac ccaccaatct ctctctctca cccaactag tagaagaata 60
tggtggcggt tacttgtctc acagactgtc gttggtagg taaaacaaac aatattctag 120
tcttcagtct aacctgtttc gaatttagag acttctcgat tctccagatg tgccaaagcc 180
aataccgtct cggtgcgacg tagttccag tggtcacact cttggaggag tgtttcgatg 240
aactacagtc cctattcgat aactaccgac aaatcagaag gacatattgt tcccggtact 300
ttttcaagat ttgagtttct tgaagggtcga gtcaccggtc caacgtgagt atttcctttt 360
actgctcgat acag 374

<210> 3534

<211> 303

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-070-Q1-E1-H4

<400> 3534

accacccag gcaacgttac ccccccattg gaaatcgcaa tcctatggaa aatactttgg 60

taccaataca tttaaggtgg actgagggag gacagaatgt tcctgtacct ggaagtttca 120
 ataactggac gcctacaagg atgcagagga aggacaacgg tacttttgaa gtaactgtgg 180
 aagctcctgc aggcaaagtc gaattcaagt ttaatgttga aggtgaatgg aacgaacata 240
 taacttatga aagcaagttg agcagcatga actctttgaa caacgttcaa ctcgtggaaa 300
 tac 303

<210> 3535
 <211> 400
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-070-Q1-E1-H6
 <400> 3535

ggccgcctaa gtgactgcgc ttcttttcaa tcctttcaaa tattgagctt ggaccatcga 60
 aatcctcgggt atatttttga ataaaaaacg agaactaata tggaaaaata tcgaagagtt 120
 gagcgagcca aaagtccggg ccagactccg ccgaatcaag tacgaataac tgccggcgggc 180
 aaagtgccag cctatgtgga ctatgcagtc aagttgcttc aagaggataa tggcaccgtg 240
 gaaatcgtcg ggctgggtaa tgccatcaat aaggctatca ctgtagcaga aatattgaag 300
 cgaaaagtcc ccaagttgga gcaagtaaca aatcttagtt cggtgactat tgaagaccgc 360
 tgggaaccat tggaagaagg cttggaccct attgaaacga 400

<210> 3536
 <211> 351
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-070-Q1-E1-H8
 <400> 3536

cccacgagtc cagcaagcgt gaaccgtgag ggtagttcat catggttgag acaaaacttc 60
 aagatggtgt tagtgcttct ctttgactg ttcgtctctt cctctacaca gttattttag 120
 cattctctgc cactatcatt ggcttggatg gacgtaaagc agacaacata tggaacgaca 180
 gcttattcta tgatgggaag tacattaact tttgtgctta ttctgcctct tctgtttag 240
 aaggagggga acatggagcg tgtaaatatg tcatggcggtt ggcgtctata atttggnttc 300

aagtcttttt cttgtggctt tttacatttg tagatgcgtt gtatcctatt c

351

<210> 3537

<211> 273

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-A1

<400> 3537

cccacgcgtc cgagtcgtgg gtgcttggtc tggttgctca acgtgtgaaa tggcagtagt 60
tgaagataac agagtcgttg ttggtggtct tccttggtca gttagtgaag aagaccttcg 120
tgaaactttt tccaaatatg gagaagttgt tgatgcaagg gttgttggtg aacgtgaaac 180
tgggcggttcc cgtgggttttg gtttcgtatc ctatgcagaa ggttccgccg tagacgaagg 240
cattgccgca ctggatggca aggatatgca agg 273

<210> 3538

<211> 415

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-A12

<400> 3538

gaaaatcctc accaagaaac cacttgtaca gcgatagaag aaaggatata tagaaacaaa 60
ttgtttcaaa atgccatgaa tgccttgtca tctctcatcg aaaagaatgg caaggccttt 120
caactactct acagacatta tttaaggaga gatgcctact tgagtggagc agaacacaaa 180
gtttctggtc agtcccaact gtctatcaac gatatgagaa gattcgctca ggactttgat 240
atatttcccc actatgttca actggaaact ttgagagaaa ccctgttgga tacggtcaac 300
ggctacgacg aacgaaaaga ccacagaata tccgtggaat tgaatagttt agaagaatgg 360
atacgttggt tggatgatgat tgcttattat gcatttgag atgaaacctt tgctc 415

<210> 3539

<211> 269

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-A3

<400> 3539

tcaggcgacg agtccgcaga gggttccttg tagattcgat gcgtccatgc agtgtttcag 60
agaaatggaa tttttcaatc caaatgggtt tcgctgtatg aaggatactt gtttggatga 120
tggtctgccgt gcaactaggg agaagaagaa gtgtgagggg aactatccaa atgagaaatc 180
ctacgcagct tccaagaagc acatatgtaa agaattatth aaaggtgatg acaacgcgtc 240
ggcattccag aaagaaaggg ataccacag 269

<210> 3540

<211> 275

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-A5

<400> 3540

gacgttgta gcgacgactg tgtgagagac tacttgtacg tgcttcattc gagtagttga 60
aatatgacga gcaagtgtca caaaacataa aacatagagt tgcattgtgt acggatgtga 120
cacggaggag gcagccaacg tgaggttgat agacgaccag cacaaaagag ggcagagaag 180
cacaagaaaa atgttcaggt ggacggggag aatattgttt tgaaaatgga aagggacgtg 240
gaaataatgc acgaaagggg agcagcagcc atggc 275

<210> 3541

<211> 287

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-A6

<400> 3541

cccacgcgtc cggcagtcac taaggaagct ttgtaccaca agttttcaga aaacaaatga 60
gaattcgagt aaaacgagta gcgttggtat cttaggaagt gttctaattg gtgtatttag 120
ctgacttgga atgtgtttat gttactagtc tttggttctc gccatactat gtttacagcg 180
taacgttgca aagataggtt gaacgtgcac cgccaatgtt tttttttggt tataaagttg 240
ttgaacataa gaaaaaaagt gaaaaaagaa aagaaaaaag gggacgg 287

<210> 3542
 <211> 303
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-071-Q1-E1-A8

<400> 3542
 aaccacgcgt ccgggatagt cgagagggaa aaagcccaga agccaggata aggtatcaaa 60
 gtaaagaaag aaggaaaagg agaagaagag agggtaggct tagaagcagc agaccagaga 120
 ggaaagcgtt aaagcatgaa agaggggaaa tccgaatgag aagagaaaaa ggtaagaagg 180
 aggaccgaat cagggttaaga ggtagaggag caagaagaga agagagaatg ctgggtggag 240
 tagcgaaaca agagaaggga agtaaagggt aagaaagagg aaagggttac gagagaanga 300
 agt 303

<210> 3543
 <211> 373
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-B1

<400> 3543
 ggtcgagga cgcgtcagag tcaaacaacc ggcgtcgaag tccggtgaca ttcgaaatag 60
 gacgtcggtc aaggcaaaca gtagtcatac gaatgataag tcttccggaa aagggcgaga 120
 tggaagagaa ttcagaaaag acaatcgctt acgtaaggag tggggtgcca agcatgccaa 180
 tagtcaacac acggtgggca aggacgtgaa gcaaacta tcacaagaac aagtgagcaa 240
 ctccgaagcg agaagagagt tacgctcgag ctctgtacat gaaagtgata caaccaatgt 300
 tacgaggatc ttcgaaacta tcaaagtggg gctgcaggaa aaccagtgag agtgagaaaa 360
 ctgtcgtctg aaa 373

<210> 3544
 <211> 418
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-B10

<400> 3544

ctgaaatttc ttgaccgat gttagtcatt attttgatgc cgatccaacc aagttagtag 60
aaagtttgag agcagacaag aagaagccgg tatcttatgt tgcagacacg acaacagcga 120
atgctcaagt tagaagcctg gacgaaatgg ttcgtttgga cacaagaaca aaacttctta 180
accccaagtg gtatgaagga atgctttcgt cagggttatga aggagcgaga gagctgagca 240
agaggttgag aaatactatg ggttggtctg cttccgctgg agcagtagac aattgggttt 300
atgaagaggc aaatgagact tttatcaaag acgagaacat gaggagtcga ttaatgaaca 360
tgaatcccaā ttcatttcgt caaatgatta gtactttggt ggaagccaac ggtagaca 418

<210> 3545

<211> 320

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-071-Q1-E1-B3

<400> 3545

ggtcgacgac gcgtccgccc acgcgtccga gcaggcatgc agtggaaca ggggtggagag 60
gaacagaggg gaacgagttc gagagcagag gagcagaagc aacgttgcca aagacgagag 120
aatcgagcgc tgcagagaga taagagagta gtgtttacgt tgggagaacg aaggggaagcc 180
ggctgttatc tccctgagga gcgcattctt tgtcaacatt gtgaggctgc tgtangaggt 240
gggtttcaag aggagggtag cgtcgtcctt tgttcgaatc actgactatc tcaaggagta 300
cgcgatgtc acgcttggtc 320

<210> 3546

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-B5

<400> 3546

gccactgcac gtgttggttg ttggggcaac gaaaaggata agagaggaag gggcaatgca 60
tatatgaagg aatggagggg aaatcttggt taggagacac cctaggaaaa ccgccaaata 120
taaaagatat acagcaagac aaggagaacc ttttagaatc ctggacggaa acgagtcttt 180

catcaagaat tgctcaaaag tggggaaagt taccgagtag cagtttggtt tagctacact 240
 ctcttcttac tagtattgct cataaagagt ctctctcgga tgagaacgat aaaaatcgca 300
 tcgatttggg acaactattg cattcgacaa agtccctttc tatttcggac agccgctatc 360
 ctttcaaaga cgaaaaaagc accaaccatc gacaacattt atta 404

<210> 3547
 <211> 113
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-B6

<400> 3547
 aatttctggc ggaagaagac atttcatttc attgtgtgga gtttgagggtg tccatttctc 60
 tcgtgttggtg tcgcgcactg ttggtttccct atttgtctct tatatatact gca 113

<210> 3548
 <211> 294
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-B8

<400> 3548
 cccacgcgtc ggctgacgcg tccgcccacg cgtccgcgtc caggaggcaa gtctcttatac 60
 atgtggtagt ttcccaaata tcctttgtgg aaacgtgttt cgtctactca cggaagagta 120
 ttgcaccagt tactacgggc ggtgtgtgat ccacagtaaa gtataatagt cttttgcagt 180
 tgagtaaagc agagatatgg agagcttctt atccaactgg gagcagaggt gcctttgcag 240
 aacaaaaggc acagcagcag tcgaaagaag gtgaagaacc ggaacgcctt atca 294

<210> 3549
 <211> 417
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-C10

<400> 3549
 cgatgttctc ttccatccaa ctttgactgt aattattggt acactttagg acataccgct 60

ggagccttga ttgaagggtg tgcactggt cttgttgcaa cgtacgtca cttacaaaa 120
 cctcccgagc aatgggaagt tggaggttat ccttgaccg tcatgatgga catcgagagg 180
 agaaaggga agaacgttcc cgtcatcaaa aaggcgttg tggatttgaa aggcgaggca 240
 tttcgcatat tttctgagca gcgggactcg tggcgtttga cagaagatta tcgttgtcct 300
 gggcctattc agcatttcgg tccgatggca gattcgatca acttcacttt gatgtcggaa 360
 gcacgagata gcaatgagta gtttgtgggt gagaataata ctctcgttga aataaat 417

<210> 3550
 <211> 419
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-071-Q1-E1-C12

<400> 3550
 cccacgcgtg ggcccacgcg tccgcctcag cagtttctcc aggttttata gtacttgttt 60
 aatgtccaat gttgtgagca agtctccctt acaccaaca gcggttcttc gttctggagc 120
 agcaccaagc ctgcgcttat tctctggtca aagtgaaga ggtcttgga gtttttcggt 180
 cttcaaagaa cctattgttc cattcaatac cttttctacc agtggcttta gcaagggtgga 240
 ccaggaatct gacgccgact tccagccaaa gtttaagagg cctgtctctg ccaatataaa 300
 tgacgtcatt aagcagcaag tagaaagttc cgatgttggt ctatatatga aaggttctcc 360
 ttctgcacca atgtgtggtt ttagctttaa ggtggtacan atattgaatg ccttggggg 419

<210> 3551
 <211> 314
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-C5

<400> 3551
 gtgatgaatg gaaactggca attttcgaga cttcgtgtac gaacggaaga cttgctccag 60
 aaagtcaatc aacttttgaa cgattgtaag ctgcagaaa gcttttctga agattggaaa 120
 gaaagtcttg ggtaagttgg agaagtgtca tggacgaaac gagaaacagt gaacgggtca 180

aagggagcaa atatatgaaa agtacacttc cattgtcacg ttagagcagt tgctaagaaa 240
agatttagaa gtgattttat gttcattctc aaagtcgctg gtaaagccta aagttgttgc 300
gagggagagg ctcc 314

<210> 3552
<211> 325
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-C7

<400> 3552

agaaacggag agaagggtat cggactcgta taggaggta tcggaagcgg tacacagttt 60
acaaaagttg caaacgcaga tggaaaattt gcgaggaacc aaagaatggg aacaagccga 120
tgcggttgta caacaagcac agcaggtttt atcacagacc tcgaaagttt aaccagacaa 180
agcaatgtat tgaaactgcg tcgacttggt caagatgcca gcatcgtaat cgaatccttg 240
ggttacaac aatcggttgc ggacttgcac cctgtcttga gtcagataaa gaggttttcc 300
gcgagggggg aaaaaatggg tcggg 325

<210> 3553
<211> 384
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-C8

<400> 3553

cccacgcgtc cggccacgcg tccgcccacg cgcccgacaa acctcaagtg ggtcatccca 60
cgttggtaaa gatagacttg tctcaaggca gcttgaaagt actccaagac tgtgacagag 120
atttagaatg tgatcagaat agcaagtttc agttggaact tattcagtat ggtctcgttt 180
cacctggttt ttggacgaga gaaaatgttc tgctcttcta gttggagctc gtgtcaggtg 240
tattcataag ggacactctc taccttttct acaagaaagg tgaagaacat ttgtttgcga 300
gttgaatgct gttgttgag acacaagttt cactgtatgc agacataaaa gcacgctggg 360
agaagcgaca ctttatcggt tgcc 384

<210> 3554

<211> 409
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-071-Q1-E1-C9

<400> 3554

cccacgcgtc cgccacgcgc tccgcggacg cgtgggtaga aagaagagag tgtaaggcgg 60
cgtcataata gaaatccgaa aggagtagaa gaaaagagag agaagaaaga aaagaagaga 120
aaagccgtac tgaagaccga cacaggtact cgaggagaaa ggagacccaa attaaggtga 180
gagaatggac gataaggaac taggcaaaag gatatggtat ctgcggtagg cttagaagca 240
gcaaaccaga gaggaagcgc ttaaagcatg aaagaaaaga aatccgaaaa agaagagaaa 300
aaggaagaa agaggaccga atcagggtaa gaggtanagg agcaagaaga gaagagagaa 360
tgctgggtgg agtagcgaac caagagaacg gaagtaaaag gtaagaaag 409

<210> 3555
<211> 413
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-071-Q1-E1-D10

<400> 3555

cccacgcgtc cgacagtgga ccctgtggaa aaaaactcaa gtagaagata ctccagcaaa 60
gtttcttcta ggcttagtac ctattcgacc aggagtgaac atcttagacc ttgcctgtgg 120
tagtggggaa acctcccttc aagttgctca cctagtttcc agccacttaa aggatgaagc 180
caaagacgca aagatagttt gcgttgatat ttcggacgaa atgcttaaag ttctcaacca 240
aagagcacag gaaatggggc tagcaaatat ggtggaaacc cgctgtgagg acgccgagaa 300
ggtcgacttt ggtgcgcact attttgatat gggtatgagt cagtttggag ttatgttttt 360
gcncatctt gtggaagact tggcgaggat tcgcggtatg atgaaaccgg gta 413

<210> 3556
<211> 99
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-D5

<400> 3556

taatgggact acatgtcggc atgtcatggt tagggataag tactgtaata ataatgggaa 60
tcctcgggaat cccacatgtg gtaagtacgt catataaaa 99

<210> 3557

<211> 379

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-D6

<400> 3557

gtcgagaagg accacagaat gtttggtggt ggtcgtttga ctgctgcttt ggtttatcgt 60
ctgacccgaa atttttgttc caaagtatta gaagatactc ctagttgttt tacagcaaga 120
aagacagtac catctgtcga gtgcttctgc agctcaagga agtcctaata tcttggtcga 180
agttgcatat ccagttgtgg agaatactcg tatgaaagct ttggtgaaag cggaagctgc 240
accaggtttg gtattgcgtg atgatattgg aatagcttct agtggaagta ccgacgtatt 300
ggataggaga ggtaaaacga gtagagggtg aacacacgtg catatatatg tttgggatga 360
gtggagcaaa agcactgtt 379

<210> 3558

<211> 378

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-D7

<400> 3558

cagcgcttgg gagcgaaact ggttgctaata ttggcaaagg aaatcgaaaa gcgtagtaaa 60
caaggcaaata cctcgtttga agtttggaac gaatgttttag acttggtcgc cgaagttgga 120
agagcacata cgaggttgcg aagagcagaa ctttcggaac agttgataca acgagcgagt 180
gctaccgatt cttctgtcgg aaacattttg aaacagtgtc aaacgctgtt tcttttacat 240
ttgattgaca aacagtcgac tttcttgcgt tagaattgcg tatctcctcc agacgcagag 300
gggttgcatc gagtacgagt cgagctttgt atgcaacttc gagagcaggc acggcctttg 360

gtggattctt ttggaata

378

<210> 3559
<211> 377
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-D8

<400> 3559

agagaaacag ttctgtagt gatgggtagc gatgattgga tacggaagcc tatgtttctt 60
cttcgcttac tgactgagaa tactcttaag agattggaag ttaccatat tgtgacattt 120
gatggttcct tgtagaagtg caacgttagt tgttcggtaa tattaggaga taagtgggaa 180
ccagatagtt acatattttt acttcagaat gcggagagac tcggacacga gcctgtggca 240
ggttcattcc tgcacgagt agtttgtcgg atgaagtctg agagagaaca gaataatgtg 300
agcacgctaa caagttcttg tcagcataat cagccagtgt tgaatttagc ccgagtgtcg 360
aaggaattgt ttgcggc 377

<210> 3560
<211> 412
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-E11

<400> 3560

cccacgcgtc cgaacaaaag ttgttttcag tagaagggtc atgggaccac caaatcagaa 60
tcaaagatgt tgcaaagaaa acagaccgcg ttttgtttga ttacgacgat attgcgaagc 120
gttatcgaat gaaactttta ttgcctccac ctgaagcatt agaagaaacc aattcgttat 180
atgtatggga aggctgcact cgagctattt tagaaggaaa ttctaggctt gcagccgaag 240
agaaacataa agtagaagaa gaacaacgta gactacgtcg agaaaggatg caacaaggaa 300
ttcagtggga accaaaatat tttcgacgct catctgatgg agaaggctat gaatttcgtg 360
aagaaactgc agaaaaattg tttcatggtg caagtaacat gtcttcatca ct 412

<210> 3561
<211> 196
<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-071-Q1-E1-E2

<400> 3561

tcgaaagctc ccgttccgcg tgtgaacata aaaaagttga ccctcgtaaa gtccaattta 60
gcaccagcgg tttgtagata gagaaagcgg tgctgggtgac gacgccagcg tcgctagttt 120
gggttgctcg aatattggaa agagcgcttt gtggaacgtc ntatttggca cctcatttga 180
tggtgggact gatcgc 196

<210> 3562

<211> 332

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-E5

<400> 3562

gggaaatggc gcgagtcgtt tcctccgtct tgcagcgttg ggacctcaga gaagatgctc 60
aagtattctc cctcaactat tggataaaaa acagggtttcc ttattcttcc atggatagaa 120
aaactttatc aacaggagcc gggcagtctt ctaccgagaa gaaacctccc aaatgagacc 180
acttggtttc tgtcttcata gatggagaag aacgttgggt accgaagggt ggactattc 240
ttcaagcttg tgagttttca cgagtagaaa taggtcgttg gtgttatcac gagcgtcttg 300
gcgggtgggg gtaattgtag gaggtgtctt gt 332

<210> 3563

<211> 334

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-E6

<400> 3563

aaccacgcg tcggacagaa cattcatcaa ctacgtcgtc atgaactaaa ctagcagtat 60
gaataatttc agtaatttct gcaagtcttc tgtgaaaaaa ttttaattgat ttttctttct 120
tggttgcttt agcaacgaag aagaggatag ctggacgtaa tcttttccct ccagcagtaa 180
ataagtgttc agctgtaca tctagtattg catgttttga cgtaacaagc gttgttaaat 240

taattttctaa taaattttaat tcgtgttcta taagttgaaa tgtgtctatc atgaattaga 300
 ggtggagtggt gtgagttaag aagagagata taat 334

<210> 3564
 <211> 262
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-E7

<400> 3564

accacgcgtc cgctcgaggt tggtttcgcg aggatgattt ccgtgcaccc taaatattac 60
 ttttatatac aacctataac atggagcaca agtccgagat gtgtggtaaa gaaacagaag 120
 tcaaccagcg ttcgacagag atgggatagg ggtgataagc atagctctcg tccaatgggc 180
 aagcgttttc acatatggtt aaagtccctg acaagtggag gggatatttca gcggtcaagt 240
 gggggtagtg gggctctgttg gg 262

<210> 3565
 <211> 250
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-E9

<400> 3565

cttggccaca gaaaatgacc gggaaagtgc agagtactta cttgtgtgag agacaatgga 60
 aaactaggag ggttttttagt tgtccttttg tttcaataca tacttgaggt tttataggaa 120
 gaaaaaacat ttgttggaag ctacttggtt tttttattta ggcttggtga aaagtacaac 180
 aatttttttt ggagttgctc gttcgacaat tctacggtat ctggtttctt cttccccttc 240
 tcctcgtctg 250

<210> 3566
 <211> 443
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-F10

<400> 3566

tcccggctcg accaacgcgt acgcccacgc gtccgcccac gcgtccggaa aaagcctcct 60
gaacaaagta acagtacagc agttgacagt tcagtttctg tgtaccagag gagagataca 120
aatactcctc agactctttc taatatgatt ggaagggatt ttgaaacgca aggaaaaaga 180
atattgctg agtttggttt gcagtcgatt attcagcaga cgccatcgtt taggaattct 240
attgtgtgtc actcagttgg tagagatgga ctgattgttc cttattatct catagagaag 300
atgaaaatga agcgtcaact ggaaaatcta atagcacaac gacgtagcgg gacctggaca 360
gtggaaggaa agaaaggaaa agttgatgta aagaaatata actggacggc taacgagaag 420
aataactttt tcagacttgt gaa 443

<210> 3567
<211> 432
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-071-Q1-E1-F12
<400> 3567

gaccaacgcg taagaggatg acgactgtga gcactcgtgt catcaagtac aactggaaag 60
ccctgtcttg tattggaaag cagcaacaac aaccaacaca agccttttct agtgtgcaat 120
atttcaggaa gagtgggttaa agtttctagt atgtcctggt tccaaacaaa ctttgtacta 180
tgactcggaa cgcgatgaat tattcaacca atcgataaga tatccaattc gtgatggat 240
acctttgttg actccttggg atggaagtgt cgttgaccag ggagaacaag tagcttcgac 300
aaaagaacaa caacaacaac aacgagaata gtagataaag aaccatcttg tgtgctctgt 360
gaaagatata gagctcgcta tttgtccctc agataagaga gcactcatag actaggagat 420
agccaatgca tg 432

<210> 3568
<211> 151
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-071-Q1-E1-F3
<400> 3568

acattggaac tgacaaaagg tccaaacctg acaagtccac actcgcgaaa attgggcaat 60

gtacagggaa gttacgcgca gtaatgagga gtggagtaaa cagaaaagga actataacgg 120
cgcaaggaac ggaagttatg gcaaaaacac g 151

<210> 3569
<211> 320
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-071-Q1-E1-F4

<400> 3569
ggtcgacgac gcgtccaccc acgcgtccgg gaaaggatat ggaaagtgct ttgaaagaga 60
tagccgacta gatggtgaca cctgtgaaaa ggtatttttag cgatctgatg aacctcccgg 120
cgttgttata acccacgttt cgagcttttg gagtncggaa gaatgcggga gcgagaanga 180
ggtggcgtga aatattatat gggaccaaag gattggagca atatgttgca gctgctattc 240
tgcattgtga aagttgtgaa caacaagatt catccactgg gaaaccgttg gtagatgtgt 300
tatctgacaa aggtatatta 320

<210> 3570
<211> 297
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-F5

<400> 3570
acggacgcgt gggatatcagc agccaagccg caaagcgaag caccaaccag aggggaaaaag 60
tcgtcttggt gtggttttta ctggacgctt gtgcgcactt gacaacagaa cttgcctttg 120
tataccactc cttaagcacg ggcgtcggac gagccacaca ctggactgcc ttgtggtgga 180
aggaatatgc caaagctgat acgagatggg gtcgttttca ccattgtact ggggcgatgg 240
aagtagttac ttctctcctt gtggggctct ctagctctcg ggtgtgccta tggtgtg 297

<210> 3571
<211> 386
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-F6

<400> 3571

gagaaagaag aaaacgtgag cgatgcatcc gtcgagcaag tacaacagag actgcacgag 60
ttgttagaaa acctggatac gttggaaaga caagtttccc aactagagta cgacagttgc 120
cgcaaggaaa ccaaccagga cgtgcagcaa ctcttaccac aatgcaaata cttgggagag 180
tatttgttac aactagctct acaggtggac gggttacaag taagagccta gttgccttgg 240
tatatactcg tgtgatacat ttggtcctag atttctagag aaagtgcgca aaaggctttt 300
cgtgggaaga gacaagaaca ggcaagggaa attaccaggc tagtgtctca acgaaggaaa 360
accaacgaac gagtgcaact attgct 386

<210> 3572

<211> 334

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-071-Q1-E1-F8

<400> 3572

accacgcgt ccgagacacg ataggagata tggggataat gttagggaga ggtaagggat 60
atgtgagtta gggaagtgtg tcgtatggtg taatggagag tgtggtaatg gaagaggata 120
agataatggg aataatgata agaatgggag taatgacgaa atcatcgag atgggcatgc 180
agacgtggtt atcggatgag atggaagggc cgactccagt cgggtgcagtg agtcatgcag 240
cgacgttagt gacggcggga gtgtatgtgg tgataaggat gggaggaata atacgaggaa 300
ggggaagagt gagangaatg ggacgaggga gtat 334

<210> 3573

<211> 296

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-F9

<400> 3573

cccacgcgtc cggtcgtgta ccgcaaagag tcgtagagtt tcaaaagcgc aaggcggag 60
gtacttttac atacaacgcc gggaagtacg accgatacat caacacacct atttacctgt 120

ttgtgtcctt caccggtctt tatgccttta ttgacggttg tctttgggcg gcaggaaaga 180
 aggaaagtca atcgtgaata gcgttttttg tccttgtgga cagtcttatg aactagtgat 240
 tcgtttgttc tgccagtttt agtttcttgt aatgaaagtt tccttttttt ccttgc 296

<210> 3574
 <211> 296
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-071-Q1-E1-G1
 <400> 3574

agaaaagttg agtcaacgca ccctcatggt acaacgcac tagaagaaac aaggaatcac 60
 aagtacagct gtgtgatgga gaacttgtgt agtttcttgt gctatcgatc ctatacgtgc 120
 aacgattcat ttcgtcaatt tgaaccgcac gttgatagca atgccttgcc agacaatatt 180
 taggtactgc gttgtttttc ttgcaacggt tttcctgtag tccttctctc gcttttgatt 240
 tagcgcaacg ctcttatact ttctcggttt gggatcgct aacggaagaa atatgt 296

<210> 3575
 <211> 432
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-071-Q1-E1-G10
 <400> 3575

ccggctcgac aacgcgtacg tagctgtttg gtgtgtgtgc ctattactgc gaaatacgtc 60
 catgaagctc tcgaacaaat aaaagaggca aagcggttgg gagcggacct ggtggaactc 120
 aggttggatc tcctgcacaa cttggaagat gagtggaac aactagtga atactgttca 180
 gtaccaaga ttgttacttg tcgaccgcaa tgggaagggtg gaaaatatag cggaccagag 240
 tctcgtcggt tatccattct tcgtgaatct tgccaactgg ggtgtgtgga atatgtcgat 300
 gtggagttgg aagctgtcga aaagtttgaa aagccggcga attgttctag catattgata 360
 ttatctcgtc actcgtggga tcgagctttt tctcgagaag aacttgcgac gatatactcg 420
 tccatgcttt ct 432

<210> 3576
 <211> 416
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-071-Q1-E1-G11

 <400> 3576
 agcgaaactg gttgctaatt tggcaaagga aatcgaaaag cgtagtaaac aaggcaaadc 60
 ctcgtttgaa gtttggaacg aatgtttaga cttggctgcc gaagttggaa gagcacatac 120
 ggagttgcta atagcagaac ttctcggaaca gttgatacaa cgagctagtgc ctaccgattc 180
 ttctgtcggg aacattttga aacagtgtca aacgctgttt cttttacatt tgattgacaa 240
 acagtcgatt ttcttgcgtt ataattgctt atctcctcca gacgcacaaa agttgcatcg 300
 agtactagtc gaactttgta tgcaacttcg agagcaggca ctgcctttgg tggattcttt 360
 tgggaatacca cctcatctat tagctcctat tgcctttgat tggatagaac ataaca 416

<210> 3577
 <211> 441
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-071-Q1-E1-G12

 <400> 3577
 tcccggctcg accacgcgta cggagtaaac agaaaaggaa gtaaaaggag ggaatgaagg 60
 gaagttatgg caaaaacacg tgccagcagc agcggtaaaa cgtgtgtagc aagcgtagag 120
 cagaagaact ggggtgtaaag gtcgagtagt agagtaagtgc taaaagggaa aggaaggag 180
 agaaagagga aagggatgaa atgcagagat ctctagagaa aggcaagaaa gaaaagaaag 240
 gaagacacag taaatgaggg gagaaagcat aggaagtgaac acggattaag aacccgtgta 300
 gtctatgcag taaaagaaag aatgagtaag aaaaaaggga gtcattccac caggggagta 360
 aaggcgcang anagaaacgc aaagcaattg acgggaatcg gaaaaagggg tggatcacgt 420
 aaattaatcc gataaaacga g 441

<210> 3578
 <211> 144
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-G3

<400> 3578

gagctcaggc caatactcga gaattgcgag atatgaatgt gaataaacca gtcctcattc 60
atgtggagtg gcagtagggg cgtgggttatc ctccagcaga gaaagcgta gataagtatc 120
atgggtgtag gagttttgac attg 144

<210> 3579

<211> 213

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-071-Q1-E1-G4

<400> 3579

cggacttcgg gagactgcta ccgaaaacgc tagtttttta gtggagacgc gaaaatagcg 60
agcgagtata agctttcaac gtgctggcca agtacaagtg ttgtgcggat caggtaagag 120
cgcgttttaa catataacga gagatagatg tatcgtcaac aatagaaact gagagacttt 180
tatgcgtcga cgcgggggan aagctgttct ccc 213

<210> 3580

<211> 301

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-G6

<400> 3580

aggaaagcca cgttggaact gagaaaaggt ccaaacaaga gaagtcagca gtggggaaaa 60
ttgggcaatg tacagggaag tatgaccag taatgaggag tggagtaaag agaaaaggaa 120
gtaaaaggag ggaatgaagg gaagttatgg cagaaacacg tgccagcagc agcggtaaaa 180
cgtgtgtagc aagcgtagag cagaagaact ggggtgtaaag gtcgagtagt agagtaagt 240
taaaagggaagg aggaaggag agagagagga aagggaagaa atgcagagat ctctagagaa 300
a 301

<210> 3581
 <211> 379
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-G7

<400> 3581

cccacgcgtc cgtcttgggt cgtcgcgttt tggtgacaag gaaagataaa tggtcgtcaa 60
 gtaggcaacg atatccaact cgcgttattt actaaccact tgtttgtgtg tgtttctata 120
 gaacagaaaac ctgtagtttt tcaggtttcc gcatctaccc cggaaaaggc actcgatttg 180
 tgcgcgggga tggcaaaactc ctcattcttta gtaaccgcaa gtgcagatcc gactttcata 240
 tgcgtaggag accggcagag ttgaattgga cgcagttgct atcgaagaat gcacaaaagg 300
 ggagagcagg aggagacaca tagaggacgt cgtacgcgca aagttgcggc tgtggcgaaa 360
 ccggtcgaag gcgcgtcgt 379

<210> 3582
 <211> 356
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-G8

<400> 3582

aagaatagag tcgctggata cggaagccca aggcattcac agtgcccaca aagaattgga 60
 aatgaatttg gacacagcgt tggcccaaca aaaggagttg gacggatatc ttcaaacgtt 120
 ggagaatcag ttggaaaaat agtttgtttc ggtgggcat atgggatcga cctcagcgga 180
 ttatgaaaga gaagaaatgt atcgaactgc taccaaattg gcatcggaat tggagacgat 240
 tggaaacttca ttgagagaag tggcgtccga tatacagcaa atgaacaaac cggcggaaga 300
 tcgagtagtt ggagagattg gtgccatatt ggatgcacat cgcaagtcgt tgggag 356

<210> 3583
 <211> 371
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-071-Q1-E1-H11

<400> 3583

acttgaagtt ggatgaaaca ggaacgcggc tgattcctca gtttgacttt gtttcttatg 60
cagctccaga tactccacaa tgtggatata tttctaccat caaaaagaaa agtgataagc 120
ctgtttccgc gcaacaagac aaccacagca gggacaacaa caacagtcct aataataaca 180
acaatagtca tcccaaggac gatatacaaa atggagagaa cagtgtacag gacattacat 240
ctaatacacac tatgaacaat aataataata gtcataatag caatatggaa tcctatcagg 300
aaccagacta tgataaatat attcaaggta gttcataaag aatttttttt tacaacaaa 360
actgacaaac a 371

<210> 3584
<211> 442
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-071-Q1-E1-H12
<400> 3584

tcccggctcg accaacgcgt acgcccacgc gtccggtcat tttgttacat cacctaaaga 60
aaacataaga gagaatatat aaatgggtcg agtgagaacg aaaacagtaa aaaagtcggc 120
ccgagtgatc atcgaaaaat actattccaa gctgactctg gactttcaaa cgaacagaag 180
aatatgcat gaagtagcac tcattccttc caaacgactg cgcaataaga ttgcatgttt 240
tgtaacgcac ttgatgaaac gtatccaaaa agggactggt cgtggaatat ctcttaaact 300
acaagatgaa gagcgtgaaa caagaatgga ctttgttcca gaagtttcag ctatagatgt 360
gggtgaagtc aagatcgatt ccagtgacan aaatatgttg gaatcgttgg gtttaataaaa 420
atctcctaata gtggtggtgg aa 442

<210> 3585
<211> 300
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-071-Q1-E1-H5
<400> 3585

acggacgcgt ggcttggaaat cgtcgctgga caagtaagaa taacaaggat aaacttgcca 60

aaaattcagc ggttcaacaa caggaacgca aatcggaacc acccaaggag aatagtgttg 120
 taagaaatca gtctcttgga aagcaggtag cgtctcattc caatcctcca gtcgacaata 180
 agaagcgtga ggagaaaccc aaagtggata gtccttcgag ggatgcaaaa gacagatgga 240
 atcatgaacc tcctcatcca actaaaaccg ctattggaga cctgtcacat acaccgacaa 300

<210> 3586
 <211> 382
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-071-Q1-E1-H6
 <400> 3586

aggtcgctgc aggtatgtta cgtggtgatg ttcaacagac gcattggctt gagcatgaag 60
 agtgggttaa cgtgacggag acaaacaaag ttaaagatga gaaatgtatt ttaatcgatg 120
 ttgaaatcc tgaggaagta cagtccgaac ctgtaccgaa tgcacagaat attccagttc 180
 gtgatattcg aagtcagctt gataagttac cgaaagaaaa ggaaattgct gtgtgttgtc 240
 gctcggggca gcgttcttat ttggcatcca gaatgtgaag tcagctgggt tttcatgtga 300
 aaaatatttc ggggtggcttt ctgtcgtatc gagatgtgaa ggcaagtgcc gagattcgtt 360
 agtggaggtt gagccttggt tg 382

<210> 3587
 <211> 351
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-071-Q1-E1-H7
 <400> 3587

cccacgcgtc ggctgaggcg tccgcccacg cgtcggccca cgcgtccgca agaaagtaac 60
 cttcgagtag tccaatcttc tttggtggca agctgtgtcc tcattctaag tataatctgt 120
 gccattcatg cagtaggagg cgatgagata agaagtttcg agagaggata ccaaacagtt 180
 gcaccaactc agacgcagca atgtcaaaag atttgtgtca gcgccacaca gagtcaagtt 240
 caaagttgta ttataactca gagacaggct ccgtgcatgt cgcaatgtgt cacagcattg 300
 ggagggaccg gcgataaaga cgtggcggaata tataagcagg tgtgctgtga g 351

<210> 3588
 <211> 386
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-071-Q1-E1-H8

 <400> 3588
 aaaagcctaa gagagagtga attaggcaag caaaggcatg agagaagtat aatagcagaa 60
 gcatgcttga agaaaaagaa agaggcaaat acgggaaagc agtaaaagaa gaaagagaaa 120
 ggaaaaaact gagtatcacg aagaaaagag ggagtagatg aggaaagaaa gatcaaggaa 180
 gtaagagtaa gagaaggagt aatgtgaatg aaagcaggaa agtatttgaa gaagagagtg 240
 taaagcgcgt accttttgca taatgtccca gcgagtgaaa gaggaagcaa aaagaaagaa 300
 aaagaagtag gcaggtaaga cccgaagcta gggatatcta tgctgtccaa gcgaagtaag 360
 gctgaaccag tagctgtgga aaaaga 386

<210> 3589
 <211> 200
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-071-Q1-E1-H9

 <400> 3589
 gcgtccggct tgtctttgca aatctacagc tttgtgttct tttccatacc atttttcata 60
 actgcttggg tcttgaagtc gaaaatctgc agacaaatca atgacacgaa tattggaagg 120
 aactcgcgag atatattctt gactagtctc atgtggaaga caacagaaaa gaacttgtaa 180
 actgtttata agtttggagt 200

<210> 3590
 <211> 252
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-072-Q1-E1-A1

 <400> 3590
 cccacgcgtc cgagaattag aagccgctct ttccaaggca gagaagaatt tgteccaagt 60

tcaaaactcg gaaactggtg aagattggtt tgcacctcga gatattcgca agagagacag 120
 tggaagagga ttgaagcttt tataaccact attcagtagt agttgttggt tggaaactag 180
 aaagaatcgt attgctgctg ttgatata tattgtatct ttggtattca aatagtaaaa 240
 tataatgact gc 252

<210> 3591
 <211> 318
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-072-Q1-E1-A5
 <400> 3591

cgaccacga gtacgccac gcgtccgcc acgcgtccgg gggaagagag gaatgttgc 60
 gttgcaatga ggatgaggag ctatgatgag ttgcatacg attgtcatcc cgattctcgt 120
 ggggtgtgta attggctgct ctgtcctata ttggatatca gtcagacac atgccgagtc 180
 gccctctata cccttagaa tacagctagt ttccgctcgt cgaaaagaca gttgtttcgc 240
 ttacgccgct gctgttgccg tttgcaattc tcacatcgga aacatcgatc aacttgctgc 300
 tggtaaagtt cgtccatg 318

<210> 3592
 <211> 400
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-072-Q1-E1-A6
 <400> 3592

agcccaacca aacgagaaac ggggggagga gcacatttta caggggaata ggggtgtgaac 60
 gatacaccaa gagaaagtgc ggtgctttat aaggaccatt tgatcattct ttgcatcctt 120
 ggttttttct attgttgtgt tggcagaaat cctacgagat aattttggag catattccaa 180
 gcgaggggaag agtgtccaac gccgtgaaaa tcttcggtag cgtcacgtcc tatggggata 240
 tatatgtgtg agagagagag agagaaaagg gggatgcaag ctttcataac gaattgcgtg 300
 gaaaaaaaaa catgatggat agcctaccag cgactttgag gatggcgtct tcacctctg 360
 ggtgatcttc caggaaatcn gtgacggcgt aaactttttt 400

<210> 3593
 <211> 397
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-A8

<400> 3593

agcaacgata acacaggtgt ctaggcaaaa tggatggaca agcaaccaa cagccaaata 60
 acaacataaa gaatagtatc taatagaata tatctttcca atgaagaaca ggagccaacc 120
 acacaaaaca cacacaccaa aaggatgaaa aacgacgatc cattgggggtt ttcattgttgt 180
 cttccaccag agacgacatc tcgacgagta gtactgtgaa aggtcaagta tgggcagagt 240
 ctctgatga agaaaccaag cagtgtttgc aatctttacg ttccaaagta caatcgatgg 300
 acttgactcc aaaagagttg gaatgggtgtg acgacgcttg tctcttgaga tatttgcgcg 360
 ctagaataaa tcatgtggac aaggctttgg agttgat 397

<210> 3594
 <211> 342
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-B1

<400> 3594

acgcgtcagc acacgcgtcc gccttgttgt gtatccttgg atggtttcca cctcatatcg 60
 actagtctgt actacaacag tttctttcaa gcgtggatta tcgcaagcag tgaaaagcga 120
 tcaagctact tctgcttcag aagcgctca agtttctagt ggggggttccg ccttacatcc 180
 ccaggaaata cccaaagatg ctgtcaagtt ttcattgaag ccttttgcca ctcacctcat 240
 cgaagctcca gaaccggttg cttatgctac gaaagaacag ttactggcat atcatcgac 300
 gatgacagtt atgaggaggt ctgagatcag tgctgatcta ct 342

<210> 3595
 <211> 362
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-B3

<400> 3595
 cccacgcgtc cggcaatttt attgcagcgg ctgagatgga caagttgagt attggttcgg 60
 tagactttca aggaaaacgt gtcgtttgta gagtagactt taatgttcct ttggataaac 120
 aagtaagtat tggtgccaat attccacata cacacacaca tatatatata tatatataga 180
 tggatagata gatggataga gagagactaa cttgtgtata tagacaggag caattaccaa 240
 cggccaacgt gtggatgcaa ctcttcctac catcaaata atattagaaa aaggagcaaa 300
 aagcatcgta cttctttccc atttgggtcg accagaagga aaagtggaca aaaagtattc 360
 gt 362

<210> 3596
 <211> 277
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-072-Q1-E1-B4

<400> 3596
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 cttcgctttg gactgttcat cgcacctct agacagttat ttagtattc tctgactcta 120
 ccagtggatt ggattgacgt aaaccacaga acatatgcaa cgacaacata ttctcatgaa 180
 ggggaagtata ttgaactgat gcgcttattc agcatcatct gatgtataat gaagtgacta 240
 tggcacgtgt aaatatatca ttgagttcgc gtctata 277

<210> 3597
 <211> 359
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-072-Q1-E1-B5

<400> 3597
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 tcgagaggga aaaagcccag aagccaagat aaggtatcaa agtaaagaaa gaaggaaaag 120
 gagaagaaga gagggtaggc ttagaagcag caaaccagag aggaaagcgt taaagcatga 180

aagaaaagaa atccgaaaaa gaagagaaaa aggtaagaaa gaggaccgaa tcagggtaag 240
 aggtanagga gcaagaagag aagagagaat gctgggtgga gtagcgaaac aagagaaggg 300
 aagtaaaagg taagaaagag gaaaggttta cgagagaagg aagtagaaaag aagagagtg 359

<210> 3598
 <211> 382
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-072-Q1-E1-B6
 <400> 3598

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 atattttattt ccgtgatttg tatgaggccg actgtgaact tggtgcaaag cctttgcctc 120
 ggaacgagtt tgcatttgaa gcgaagaagc tttccaagga tgaaataagg atgttgtttt 180
 taaaggagat acttgagtat catccggata tcaagaacga gcttcaaggc tgtgagcttc 240
 actatgaact tccttcgcaa gcggaagctt ttagacaggc agtcaaacc aagttgggag 300
 gtaatcggtt gagaaactat gagtcgatgc cgaaagagaa gttgtcgcat cacgtatcgc 360
 gtgcttacia tgacatatta gt 382

<210> 3599
 <211> 382
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-072-Q1-E1-B7
 <400> 3599

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 ccttttttgg tattcaaggc cttggagact ttttgcaact gacgcgggaa gtggaaagaa 120
 tgcaaccgat gccaaacact cggagatggc acaaagtcaa ggagtttcgg aagctgcgca 180
 agaaagtggc tccgggggaaa ctacctcact ggaacagaaa ctccacctt tggacctgtc 240
 aaacttggtg aaaggctgac atccaaaaga caccgaagtg tataaggagt ttcaaagaag 300
 acttgaagag ttcgaagcgt cgttccaagt agagcatgtc ccggtgaact ttgaagagct 360
 gaggaagaaa gtgcgttttc ct 382

<210> 3600
 <211> 358
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-072-Q1-E1-C3

 <400> 3600
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 tgcaaagact gctctgagtt gcctctttct ctctttcctt atcgctgccg cagttgcagc 120
 cgacgtagtt tcagaggaga gatggggata tgctcagcaa acccaacaac agcaacagt 180
 ccaacaagta tgtaaacagt atgcatacta tcagagtcca gtctgcactt ccgtaaccac 240
 acagagccca tactggaccc aatgctcgaa gactgtgcaa acctttgtcc caagccagt 300
 cagtacttat acccaatctc ctacatggac ctattgcagc acctacacca ccactagc 358

<210> 3601
 <211> 319
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-072-Q1-E1-C4

 <400> 3601
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 ctttgtacaa ccaaagaaat acctatcttt caataaacia gttttccctc aaaaaaaaaa 120
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agggaggaag 180
 aacaaaagga ataaaaacta aaaataagcg tgaaagaaaa gaaaaaaaaa gggggggagg 240
 gtcaaaagga ttcaagtcaa gggacggggg aatagaacgt caaagaccgg gaaaaggggtg 300
 acgtaaataca atttaaggg 319

<210> 3602
 <211> 267
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-072-Q1-E1-C7

 <400> 3602

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aagtgtccgt gcgctacgaa gcattgtaat tgtggtgacc aaaattgtcg ctgtggtaca 120
aaatgtagtg gtttgagtgc tgaaacctcc aagtgttggt accgttgtca agggaagact 180
tgtggttgca cgcgttgccc atgtgaagca gctagtaact agaagaagta ttgccgtttt 240
taatataaag ataattgagt ttgtaag 267

<210> 3603
<211> 341
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-C8

<400> 3603

agcccaagcg tccgattctg acaggacccc gaatatacctt ccgttaaaag agccaattcg 60
tggaatctt cagatttcaa ctcatgcggt gtatttccca gatgcaactg aaacattcgt 120
tctcgtgcgt gaacatttgg tagatgaata taaatacgtc tttcaaactt tcttcggata 180
agcaatattc aaaggaagat gagaaagaaa gtttggatta aatgccggag atattgtttt 240
aattggcttg agatactatc aagacgaaga aaaccgatat gagactagcg tataatccac 300
atgaagctag agcattgaag tctcaatgag aaattccaga c 341

<210> 3604
<211> 231
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-D2

<400> 3604

agtggagagg ctctattgtt tatttcgtct gctcaatgct tgcaaagaaa agaaaccgag 60
tccacctatg cctgttgact atattcggtt taaggattcc gagaatagag gaccactagg 120
tcatatacct agaagaattc gcaagtattc cataacaggt tctcctattg gaagtgatag 180
aaagaaaact tgggaaaatg gcaatggaca ataaaacgtc gttgcgattg t 231

<210> 3605
<211> 404
<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-072-Q1-E1-D4

<400> 3605

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gctattccaa agaccaccgt gaacaaagt gctacagaag tacttgccaa tgccgggtgcg 120
catctttcgt ccgatgccaa agaactattg gttgggtttt gttctgaatt cgtgcaactt 180
gttagttccc acgccaacga attgtgtgaa aaggaaaaca aaaagggttat ttctcccgaa 240
cacattttgc agtcgttgga agaactgggg tttggagatt attgccaaga agtgaaacaa 300
gtgtatgaag aattcttgga aattgaaaag gtaagtangg aatatatcgt ggtgggtggtg 360
gtggtgggtg tttgtggaga gagagagagc tgacggactg tgat 404
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<210> 3606

<211> 398

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-D6

<400> 3606

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gtgaataagt gagtattgct gatgaaacgc cgttatttta cgcaaaactt tgattctcgt 120
ctcatttttt gttcgtctcc taataaagag agttcatcct ctgagagttt ttccaaagtt 180
gcctctaata ttcttggaac ttgcaacata ttttgtgcat attcgggaat agtatggtgc 240
cttgacgttg cttctcttcg ctttttccaa attggcagcc acgaggatgc cttgtcagac 300
gtagcgtttg gtcaaactgc tgcagcaatc agttgttcat atgacggtaa agtgaatatt 360
tgggatagtc gttcacccca tttccgctca gttcaaag 398
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<210> 3607

<211> 387

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-E3

<400> 3607

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 ccaaattaag gtgagagaat ggacgataag gaactaggca aaaggatatg gtatctgcgg 120
 tagaacatat gaaagaagca gcaccgactg tttagcaaaa acacagcact ctgcagaaaa 180
 gagaaaatgt aaagtataga gtgtgcggcc tgccaaatag tagagaagaa atcgatgaaa 240
 gtgaaagcga gtaaaagatg aggtatagag aatggcggtc ctaacagtaa ggatccaaag 300
 gtagcgaagt aaatagacgt ttgaaaggcg tccagtatga aaggagaaac gagtgtagca 360
 ctgtctagtc gtccaactca gcgaaac 387

<210> 3608
 <211> 398
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-072-Q1-E1-E4
 <400> 3608

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 aaagacaaaa tcacgacgag tattttctgaa gcgataagat atgaaaagga atatgttggt 120
 tttacttggc agaatttata caaactgttt tttgatgctt atcctttgtt gcacacctgtg 180
 cctttgatag atatcattca ttttgtcat ccatccaata gcacaattct gttatccgat 240
 gctcaatatt ctgcattccg ggaacaatta aaagcgatgg gagtgtcgaa taatttgagc 300
 cacatatgag aaaagaagaa agaaaagaat actcgatttg ttgctgttgg tttgttgcac 360
 aactgtaaag tatttcatac gagaagagga gactgtat 398

<210> 3609
 <211> 356
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-072-Q1-E1-E8
 <400> 3609

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 tgtcttttag atggcgacaa actggtgtgg ttcctttcat ccaactacac atcgggtcttg 120
 agagattggg gtcagtttac ggcagaagaa accacgcagt tgcgtcactt gttgtacttt 180

ttagaagaca ttgtgcactc ctaatttcct cagaaatggg atgccaacaa ccacaatata 240
 ataccacacc tttttttttt attcaaaaaga tacaaccatg tcgctcggtg ttgttggttt 300
 catctcctcc tcctccttgc tgatataaaa aggcactctac gcagtcgccg tcttcc 356

<210> 3610
 <211> 335
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-F4

<400> 3610

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 aagtttttgt tcttgaatgt gcttctgtaa atgtcttcag gtgcagttat tggcggggtc 120
 gcagcagctt ttggaactgc ttcggttta ggagttgtag gaattatcgt tcatgtgtgt 180
 cagtatcaac ccaacgctag aatgcgaata ttggaacgta gaagaagctt tattgagaga 240
 gctagacaaa gacaaagtac gtttccacca ggtcaagaga gcaaagctgt tgatttgga 300
 gagattgaat gttgctgtcc acagttgaag tattt 335

<210> 3611
 <211> 218
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-G8

<400> 3611

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 atatatacgc gtgtatatgg actgaatggg cgatatagac tcaattatat acaaggaatc 120
 aaagttatta tagcttatat gaatgaactt gtcaattgct agactctttt cccgctatat 180
 tccactctaa taatataaaa ggataaagtt gttcttgg 218

<210> 3612
 <211> 406
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-H2

<400> 3612

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gcagttactc ccgaaccaca catacaaate acattttctct tatctaccac cccatgacgt 120
tgaaatattt gtttcaactc ttctttatcc agtatatctt ggccatcttg agttagcaac 180
tctacaaacg ggatattgat agctgtgtcc acgtgaccac taggaactcc tgctcgtggc 240
tctggttctg ttccatgaaa acgaccagaa gaacgagcat ccaatattac acaatctctt 300
ggagactgga cataactcttt tactagcaac tgatcggcaa caaactgtgg ttgatatcgt 360
ggcacaaagt cttgttggtc tcggatggca tccaactatt atcatc 406

<210> 3613

<211> 401

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-H5

<400> 3613

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caagaagatt gaaaagtata ctggatgaat atcattcttt gaaggattca aaggaagcag 120
tggaaagtct aaaggaaata cctcaagcca acttggaat gtttgtttat cagtttatc 180
aggttgcatt ggaaagtaga acagccgtga gaaacgatgc tgtctctttg ttcacgcttg 240
caaaagatat tatcacccca gagattgtga aaagcggatt tgtatcagtc atagaaatgt 300
tggatgatct cgatatagac gatcctcatg caagcgattt tgttgcttcc cttgtgggtc 360
gtgcagctgc tttgggcatg cttactgatc ccagtcaaga t 401

<210> 3614

<211> 373

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-072-Q1-E1-H8

<400> 3614

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ctctgttgcc ccttagtggc ttgaggaatt cgggaggtga aaagatggtg tcaattatgc 180
 tttatttatt ctcatgcag cagtcgatga aggtccttt cacccttgtt gatgaaatga 240
 accagggaaat ggaccctact tttgagagga agattgtttc cgtcatgatt agtgatgcac 300
 gacattccac aagttctcaa gtgtttctca tttccccgaa attgctcact gatctagagt 360
 ttggaagaga aac 373

<210> 3615
 <211> 464
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-001-Q1-E1-A1
 <400> 3615

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 ggcaccgttt tttgtgggtt tcaactcgtgt gttttgtctt tttaaaactc gaagactatt 120
 tatttcttgt tatgttttag aggtgtttct acagtgtgtt tttggaattg tcgtacacca 180
 tgcttggtgg ttggtgaatg gctccagtga caaaaaaggt tgtcactttc ccaccattcg 240
 ctacagctcc aaccaccaat ctgtatacac atacatatgc ataaccacat atgtactaca 300
 cagccgtggt gtaaaaaacg ataattcgaa tggttgacaa ggcttgattg aggtcaaaaag 360
 actagtgaac gtgtagaga aggtcacttg gaaagggggc cacttccttg tgtaaagtgt 420
 ccactagtaa ctaactaatt cctcttgaag agatttcacg tttg 464

<210> 3616
 <211> 426
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-001-Q1-E1-A2
 <400> 3616

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 gcagtgcgc actatggaga agcactcaag gcactagtga atgaaaaagt gtggagatgg 120
 aatcatgtct gctatcgata tgtatgtatc tgtagataaa ataaaaggaa ggcattggaga 180
 agaccgaatt gtggtaaaat tgaatggcaa gtttttacct caagtagaag gcaaagcaga 240

agatgacacc tcttctttgt cctcttgaag atattcgtca tggaagaaga tctcggagga 300
 tggcgagttg gctattctct aatgtggagg gattatgtgt gtagagagag aaaagagagt 360
 ggtggagaat gactcctttt tttgtgagtg ttgtcatgtg aaaaatacat tgttatgatt 420
 ggcaaa 426

<210> 3617
 <211> 390
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-001-Q1-E1-A4
 <400> 3617

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 ctggtacgag tgttgttttc gttggcaaaa ttttgagcta aatagttcat ttgaggtatg 120
 tcgcctgagt gagttaagca ggtcgttcga agacttgaaa catcgatttt tgaattcctc 180
 ttctacagaa gaaagacaga aactgcggga acgaatcaaa atacttaaag acaaacatag 240
 ctccaagtgg aatgtaggca ctagtctcgt acaacactta gaaaggcagt tgatatatta 300
 caaaaataaa ttgaggaact tgtaaaaaaa aaaaaaaaaa aaaaaaaaag aaaaaaaga 360
 agaaaaagag aaaggaggag gagggagaaa 390

<210> 3618
 <211> 146
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-001-Q1-E1-B1
 <400> 3618

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 agaaagagga aaggtttacg agagaaggaa gtagaaagaa gagagtgtaa ggccggcgtca 120
 taatagaaat ccgaaaggag tagaag 146

<210> 3619
 <211> 401
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-B2

<400> 3619

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tcgatatgtc aagtggctgg aatactaattg tggaacggaa ggtaatggga atgctgggtgc 120
tggacaaggg aagaacaagg ataagaagac cagtggagaa cttgcaaaag atagtttaaa 180
gggtttggga atggcagcct tgtcagcggg taagctgggt tatcgcggtg gcaagtgggtg 240
tgtggataag gtggaaggcg ccattgacga ccacaagtca aaaggaagta agagtggcgg 300
tggtggaat tcacgttatt ctctgtgaaa cgtaataact tggatagaaa cagaacgaga 360
cggtttttta tatttgttgt gctggataaa taattttctg t 401

<210> 3620

<211> 448

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-C3

<400> 3620

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attttccaaa cactgaactt ttataggtat tgtgacagaa agagattatc ttagaaagat 120
agtacttttg ggacgctcat ccaagacaac ttatgtaaag gatatcatga cgtctgccaa 180
tgatctaatt agtgtcaacc cttcagcttc tcttagcgaa tgtatggaaa taatgactca 240
gaaaagaatt cgtcacattc cggtaataga tagtgaaggc aatgtgaagg gaatggatc 300
cataggagat atcgtttagag aactagtcga agaacaacga catgaagcga agaaactgaa 360
tgaatacatt caggggactt attaagatgg gctccttcga ggcttgaagt gcttttgttg 420
atttgtgcac agaataaaca tttgtgtg 448

<210> 3621

<211> 401

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-C4

<400> 3621

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 gttttctgta gttgtgacaa cagttattgg aaggggcaag ttggagcttt gtgacagggtg 180
 tgctggactg ggtggagctc agtgttttgg ttgcaagggt accggagtta tctatttgga 240
 agaggggtaca aaaaagtgt aagcttgggt cggacgagga aaaatattgt gtagacgatg 300
 taaaggaact ggatattcta aaatgtgggt ttaacagact tgctactgtg agggcccccg 360
 aaacaaataa aacaacgcta acccgataag ggtcatccca g 401

<210> 3622
 <211> 323
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-001-Q1-E1-D2
 <400> 3622

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 ggtttatatt ccataatgtc ctctgagttg gatgaagatg accatcccg gcgacaaata 120
 atcggatcta ttagcttagc agatgcagat gaatgacagg gtaagagaca taatgctcga 180
 ttctcctttg caaatcctt tatacaggtc agaagcttat cgatatttct atacatctcg 240
 tcttgctcgc aaccaggaag aagaacctaa agaaaagata aagctaagaa cggcgatgtc 300
 ttcctagaac aagagtattt. tgg 323

<210> 3623
 <211> 467
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-001-Q1-E1-D3
 <400> 3623

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 ggaactgttc aacttgcttc gttactaaat tcgttctttg ctgagggttt tgaagtctcg 120
 cctgtgtacg atgccaggga gaagatagtg aactttgagg tgacagactc tcatggcata 180
 tcttttcgag accgaatac tattttgtat gtgactccat tgacaagaga ggacgcgaaa 240

gcagacagcg ctccagattt thtagagttt cttacttttg acaactttcc tggttacatg 300
cagtcttata tagatgtagg gcgaaacgta cgaagcaggg gcagctcacc aagtcgaagt 360
cctgtcaaac ggataaaatc tgaaggaagt tgagagttga atgtcgatgt atagacggcc 420
actagcggcc acgacgggcc gcagtctcgt taagaaataa ctcacta 467

<210> 3624
<211> 363
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-001-Q1-E1-D9
<400> 3624

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cgtgtaccgc aaagagtcgt agagtttcaa aagcgcaagg cggaaggcta ctttacatac 120
aacgccggga agtacgaccg atacatcaac acacctattt acctgtttgt gtccttcacc 180
ggctctttatg cctttattga cggttgtctt tgggcggcag gaaagaagga aagtcaatcg 240
tgaatagcgt tttttgtcct tgtggacagt cttatgaact agtgattcgt ttgttctgcc 300
agtttttagtt tcttgaatg aaagtttcct ttttttcctt gcaaaaaaaaa aaaaaaaaaat 360
gaa 363

<210> 3625
<211> 427
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-001-Q1-E1-E2
<400> 3625

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aagctttgtt aggcctctca attttggtcg gcaaatgacc ctgtcaatct tgctggtatg 120
gtcgtcgcaa atattttacg tggatgattt caacagacgc attggcttga gcatgaagag 180
tggttaaacg tgacagtgac aaacatagtt aaagatgagg aatgtatttt aatcgatgtt 240
aagaatcctg aggaagtaca gtccgaacct gtaccgaatg cacagaatat tccacttcgt 300
gatattcgaa gtcagcttga taagttaccg aaagaaaacg aaattgctgt gttttgccgc 360

tcggggcatc gttcttattt ggcatccaga atgttaagtc agctggggtt tcattgtgaaa 420
aatattt 427

<210> 3626
<211> 449
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-E4

<400> 3626

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tctctttcac acagcgtttg aacagtgtca gaactttaac agtaaacaga aagtcttcac 120
catctttccg ttttacttgt acctcccgac agactcctgc tactggaact atcaaggact 180
ttgtgaccaa aagagctatt tatacccttt gctattactt tagtgagcta cacgacgaat 240
tttctaagag atggctcctt caattcgaaa attttggtga ccaagggtgaa cttagagaag 300
gttcttatgc ttatttggtg cgactgttta ggtcgcctat gcatattttt gaaatttcaa 360
gtggacctga ccctcgctat cactcctata gtcgcacttt tgaaatacaa ataagttcat 420
cctctattgc aattcgggta atgagagta 449

<210> 3627
<211> 439
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-F1

<400> 3627

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tggtttgggt acaactattt ggtcaccttt ggcttggggt atcttatctg gaaagtacag 120
tggaaagaat attccagaag gttcccgact gtcactcgag aaatacaaag gattgaagga 180
agtagctttt acggaacgag agtggcagat tgagaagacc gatcagttga agccacttgc 240
tcaagaactt gggtgtactg tagctcagtt agcgattgct tgggtgtgcag cgaatcccca 300
tgtatctacc ttgattactg gagccacaaa gttgcagcaa ctagaagaga atttcaaggc 360
aatggatatt gttcccaagt tgacaccgga agtaatgaaa cgaatcgacg acattgcaca 420

gaccaaacca gactacaat

439

<210> 3628
<211> 444
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-F10

<400> 3628

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aaaaaaaaaa acacttttag agataatgta atgaaattag tatgtccatg gcgtttggct 120
ccaataacctg taataggtat tcaatgtctt ttctagccca tatggatatg ttctcgtctt 180
cgtactttgc gatacgagcc gaacgatcta ctactaacta gtgtcttggt attcgttctt 240
ttgattctga atgtcgttgt ccttataata atgtgaagta atgcgatgca taacgcagat 300
gcaaccattt ctttgaagc gaatggattg aaacctcctt tactggtaat gacttacacc 360
atacaaatgg gatttgatcg acgaggggaa atgaactgcg aagaattgct gcatatcatc 420
aaggcccaag atccggagat ttta 444

<210> 3629
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-F3

<400> 3629

cggccggtcc ggaattcacg ggtcgacgca cgcgtccgca acataacttca ccagataatc 60
cagtggtttt ctttgatgtc agtatagctg accatccggt gggaagaata aagatggaac 120
tttttgccga tattgttcca aagactgcag agaactttag gcagttttgt actggtgaat 180
atagaaagga tggattccc gttggttaca aaggctgtag ttttcataga gtaataaagg 240
actacatcat tcaaggaggg gactttgtga atggagacgg cacaggttcc ttgagtattt 300
atgggctata tttccagac gagaatttca tcttgagtca ttccggtcca ggagtattat 360
ctatggccaa tacaggacct aataccaacg gcaatcaatt ctttattact tgtacgtcgt 420
gtgagtgggt ggacggtaca catgt 445

<210> 3630
 <211> 442
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-001-Q1-E1-G10
 <400> 3630

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 ccgcttggca acgcaaagaa tttaaaagta tgacaaagcg acagcttcat aaaaatacgc 120
 ttgaacatct taaacaacat cgaaccatgt tccctgccat cgaagcaagg ttcctgattg 180
 taaagacacg agtaaaactca gaatcgagtg ttttttggac aacaaaaagt tctactgagc 240
 catcaaagca ttcaaaacca aaagttttgg ataactttcc tgtagagacc ctatgaattc 300
 ctggcagggtg ctgttcaaaa atgtaataga acagtttggc attgaaacct tatcatcttt 360
 tagacataag catagaaagg ttgcgagtga gtcgacatac taaattcaca ggaaattttg 420
 gacgtctcaa gttcaaactg tc 442

<210> 3631
 <211> 441
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-001-Q1-E1-G4
 <400> 3631

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 ctcctttgac gataaaagaa ctagaatgtt ggaaatattc acagagtcaa aaaccttttt 120
 cactctcaag gaattggaga aagtagctcc aaagcaaaag ggcatagtgt taccctccgt 180
 gaaggaagtt ctccaaagtc ttgtcgatga cgacgttgta tccagtgaca aatgtggaac 240
 gcaaacagtt tactggtgcc ttccaagcca ggctgtacaa aagaaacgta gcagaattgc 300
 ttccttaact gaaaaattac aatcaaaatc cgaccagaag caacagttat tagaaaaacg 360
 cgaagaactt cgcaactgtc accaagatac tgaggagagg acacaattaa ttgagcagat 420
 aaacgcactt gaatctcaaa t 441

<210> 3632
 <211> 432
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-H12

<400> 3632

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 agagatTTTT cgtatgactc cgcataataa gcagggtcatg atgttctcgg caactctatc 120
 gaaggaaatt cgaagtgtct gtaaaaagtt tctatccaat cctatggaag tttatgtgga 180
 tgatgaagct aagctcactc ttcacggttt gttgcaatat tacttgaaat tggaagagca 240
 tgagaagaat agaaaattga tggatctgct agacacacta gagtttaacc aagttgtgat 300
 ttttgtcaag tctgtgcaac gagccaatgc gttgaataag cttttggtgg aatataactt 360
 tccgtccatt gcaattcata gtagcatgcc acagtcggaa cgtatctcaa gatatcaa 420
 gtttaaagat tt 432

<210> 3633
 <211> 466
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-001-Q1-E1-H4

<400> 3633

taccggaccg gacttctcgg gtcgaccac gcgttcaaga tatcgaaatc tcggattctc 60
 acttctcgat tgttctcat tggcttttac agcgcagttg cctgtatctt aacaggatgc 120
 attggcgaat catcaaataa tttgcgaaaa aatgttcgtg tcttactccg tacctgcaag 180
 aaacttaccg gctttggcac gtaacttttc caatgtctgt ctctcgagga gtggtctgag 240
 agggggatgt ttacgaaatg tgaaagtttt caaccacaaa cgacctgcaa gggtgttatc 300
 tacgaaaatg agaggaggcg accatgaaac gagagaactt agtcgtccta tgcgtacact 360
 tgattccgct ttcgacgaac ttttagcttt tgcgcacgat ccctgggtcca tgtttcgctc 420
 tccatggagt ctgtcgccca taagtatggc agtagacacg tggatg 466

<210> 3634
 <211> 461

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-001-Q1-E1-H7
 <400> 3634

taccggaccg gtagttccgg gtcgccccac gcgtccgcga gactggtaag catgacgtct 60
 atttgggagg catccaaaga acgcgtttat cattacaaaa acacagttcc ttaccactta 120
 aaggttatcg acgcttttct cttgtatgtc ttttctactg ctgccatcca gtttggtttac 180
 gtcttggtcg ttgggacctt tcctttcaac gctttcttgg cggggtttctt ctcggtgtgct 240
 ggagtttttg tgttgacagg taaataatac agggatacta tatagctgcg gttttttccc 300
 tcacgttatt tatctagtgg ccttgcgcat gcaagtgaat ccgcggaatc agaactcagc 360
 caatcgatgg gaaaaagtga acccctaccg tgcttatgta gaatggctgt tttgtaactt 420
 gattttgcat attgctgtta tcaactttaa tggatgagag a 461

<210> 3635
 <211> 455
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-001-Q1-E1-H9
 <400> 3635

caggtaccga gtctagaatt cccggggccga cccacgcgtc cacaatacgc tataccaagc 60
 ggaagatctt cctttcgaga ttgagaaaat gccagatata tacaccaaatt ttcgagaaag 120
 tgtggaagct ggtgggaaga taagagaacc gttggaactt agtgaaggat ttccaccag 180
 accacgttgt gaacctggtg aaattccaac gcttactgac cttggactag atgcatcccc 240
 cgagcgagta cctggtgagt cgaatcctcg tagcatacat ggatttagac gaggagaatc 300
 ggagtcgctg aaaagaatgg aagattatct ttctgaaatg agaagtaccg aaatcaattc 360
 taccaacgca ggagcgtatt tgggtgctga tttctcttgc aagatttcgc cttggcttgc 420
 gttgggatgt attagtccta ggaagatata tcacg 455

<210> 3636
 <211> 435
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-A4

<400> 3636

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caacatcggg aatttcgaaa aagttgggtt tccattaagg aaacttttgg aaggccttga 120
gaagtccttg gtacagattt cagcaaagtc cttatcgttg acaattctcc ccaaacgtat 180
ggtttgcaag tggagaatgg tattcctatt accacatgga ttgacgatag acaagataga 240
gaactgttaa atctaatacc ttttttgaag cagctttctg tctgtgacga tgttcggcca 300
attttgagta cgcgacttca tcttgctgat ctcgttgac gttatcgcaa attgatgtat 360
ttgaactcgt tcgatacatt ccacatggac gatgagaaag atatgtgtgt ggcggtgacc 420
tgatactttt tcggt 435

<210> 3637

<211> 213

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-B1

<400> 3637

aggaggcaaa tacgggaaag cagtaaaaga agaaagagaa aggaaaaaac tgagtatcag 60
gaagaaaaga gggagtagat gaggaagaa agatcaagga agtaagagta agagaaggag 120
taatgtgaat gaaagcagga aagtatttga agaagagagt gtaaagcgcg taccttttgc 180
ataatgtccc agcgagtgaag agaggaagca aaa 213

<210> 3638

<211> 418

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-002-Q1-E1-B10

<400> 3638

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ttaaataat tacacaaact ggccggtaac cctaaactgg aaacacaatg gaccttggaa 120

taaaaccacc aaaggcttcc ccggaaggca cggccaaaag tagcaccacc gaagtaacta 180
 taaaagctgc ggaaattgta aacttggtgt acatttggcc tgggctccc caaattggac 240
 ttgaaacaaa tcgccattaa agcaagaaat gcggaatata acccaaagcg ttttcaagct 300
 gtcacatgc gagtaagaaa gccacaaca accgccctca tatttagttc gggcaacatt 360
 gtggttacgg nggcgaaaag cgaagaagaa tccaagcggg ccgccccaaa gtttgtgt 418

<210> 3639
 <211> 450
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-B11
 <400> 3639

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 cggctcttct tcttctggtt cttaaaaggc ttcaagtgt tgtctctcaa agaaaagata 120
 tgcttccttt atactagtta ctggaaattt gcttgacac cctcatgtga taacgactcc 180
 tcgcaagacc tctcggttgc tcttagggca acgaaagcga caattgtctt tcacacatac 240
 tatactcctt cgttggacga tgaacatctt tcaacgtttc ttctgcatca tccgtgccaa 300
 tgtgaaccaa ttattatctg gtatggaagg accaagaaag ctgatcaaca aacagttgac 360
 gatatgaaaa gtgacttggg gaaagtccgt caagcttatg cagaagtagc agcaagtcag 420
 aaacggctan aaaaacagcg tcaacaagca 450

<210> 3640
 <211> 419
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-B2
 <400> 3640

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 gattgccaaa gccatggaag aacatgaata gcgcatttta gaaaaggact gttttatgga 120
 aacttcctca ggcttgttgt acggtttggc agctggcgta acttatgggt tcatatacaa 180

ctttgatacc gggttttgaga acgatcctcg agcaataagc tttgagccgt tacagccatt 240
 tgggtgcacag gtttaacagg ccacctctca agtttcatgg tgctgccaat cgctttcaat 300
 attctccaca acgctgctc caccggagcg ctggttcttg caggtacctt tgtcgtagca 360
 catgctccat agcaagatac ttttgtaaatt gatttggatc cctgtggatt agaacgtat 419

<210> 3641
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-B7
 <400> 3641

taccgtatta ggaattcccg gctcgacca cgcgtacgga caagagcaac aacaacacag 60
 tggagggaca aatattcgta gaatggaaca aatattgttg gagagtcaaa acaaagcgct 120
 tggacaggtg aaaaaggag ccttgtctat aaggctgttg aaccacgttt ccttttctgt 180
 acccgaacca gtgaagacgg gcaagttctt ttgcgagatt cttggctttc gagtggttcg 240
 acgacccaac ttcaattttg acggtatatg gttgtacagt tatggtattc aaatacacct 300
 tatctaaggt gctgctctcg aaagaccaa tatcttgaaa ccatgcacag accatatact 360
 tttcgaagcg gatgacctca caagtataca gaatatattg gacacttta atattccgta 420
 tcttttggag t 431

<210> 3642
 <211> 342
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-C2
 <400> 3642

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 ttgggatgat gactttactt gtttttggca aggctctatt caatttgca gatatttcag 120
 gcttcttttt ggctccacac ttgttgtagc gtattgtagg aaatagtgcg agtcctgggt 180
 tagcggaatt gaggaacat cttctatgag gtattggctc attacgtgga tattctacgg 240
 atgcgctaag tactgctata tggttccttac aatacgctgt ggaactgcgt tttcaaccat 300

gtcgacgatg ttctcggcac ttgaatttat gattgtttgg gt

342

<210> 3643
<211> 217
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-C7

<400> 3643

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actgctagca ggcggaatag tatagtagat gtttctcaac atagacctgg ctttacacgg 120
aaaccttatc acctatggat tcggattaag agtttcccaa ctggtttcga gtacatgtat 180
aacgtctcag tgagctcgaa tacacaatga gggtcgt 217

<210> 3644
<211> 339
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-002-Q1-E1-C8

<400> 3644

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aggatccgag tttccttttg ataagccgct tttaaagtgg aagccgttgg aaaaggcgga 120
agaagaaatc cttttcaacg atagggtgcg tcttgtaaca gactgcattg ctttgggtgc 180
aactggtttc gtgatctata aatgactta ccgttttctc tatggctctc ctgagcgatg 240
aaactgttag ttttaatatata tgcgtttaga aaactttgtg tggaataaag attggctcta 300
gttgtcgact tgagggtttt ctcgacgaca gaaaanann 339

<210> 3645
<211> 391
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-002-Q1-E1-D6

<400> 3645

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tcagttcaac ttgatcaacg aaccatccaa tgtcttaciaa gttgttaaac atttacagcc 120
acgtcagctt gttcctttga tgaataatga cttgaatatc agtggataac tttcttatgt 180
catcgctcc aaaggtagtt tagaagagtt tgaacgttcg attcgtgctt ctggttgag 240
aaccgaagta ctcaagccag tgataggaga accctgtcga ttactgaaag aagaaagttc 300
atatcgagtt gttggagcaa ctgtctgtcc atctctcag gaacaaactt aaaggctgaa 360
aataaaaccc acggtctctg ctatggaaaa c 391

<210> 3646
<211> 399
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-002-Q1-E1-E1
<400> 3646

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aaatatttgt acgcatctt ctggtgccac ctggtgtaca gattgtggaa tcccaagaaa 120
tggaaatggt ctatttgaaa ccggaagag aagacaagga agctatggaa gagggatctt 180
aaagtgcatt ccaatagaga ttgactgat gaaccaatcg aagtccatt tcataactcg 240
ataaggagat gattccacta ggaactgttc gaaggagact cgtaccatt ccctatatat 300
atatatattt accacacaca tatatataaa taaccataga ggatagatag gatattcgat 360
gtgattacct tgtaaatgc caacgctcct tctgtcgc 399

<210> 3647
<211> 305
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-002-Q1-E1-E4
<400> 3647

gtaccggtct agagattccc ggtccaccc acggtccgc aagctgcgat tgcagtggca 60
aagaaaggag ctaaggccaa cagaaaaag ctcaagaacg aaaatttaaa gaataataac 120
gaacgttggt ggtcaaaaaa tcttgaaaa cgaccgggtt gggaaaaacta tcaaaaaaag 180

gtctgcaaac acgccccaaa cgtatcaaaa gagggcaaca tctgtttttg aaatgttcaa 240
 gaaaaagtag tagtagttcc tactcacgtg ttcttaaaat atacttaata aattcaacag 300
 ttgcc 305

<210> 3648
 <211> 432
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-E6
 <400> 3648

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 atatttgac gctacgaaag tctctcaggc gtctaattgt atgtgccgag atgcccttaa 180
 cagtgcgctt gatgaagaac ttgaacgaga cgaaagagtt tgtattattg gagaagaagt 240
 aggacagtac caacgcgcct acatagttac tcgtggcttg tatgaaaaat atggttcaag 300
 gagaatagtt gatactccta tatccgagat gggtttcacc ggtttggttg taggagctgc 360
 attcaacgga ctaagacctg tttgtgagtc tatgacctta aactttgcaa tgcaggcgat 420
 cgaccagatc at 432

<210> 3649
 <211> 454
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-002-Q1-E1-E9
 <400> 3649

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 agcagtacgg gacggaaaga ccccataatt cttgactaga taggtttaag gaggagagag 120
 aatcatgaag tacaggacgt ggggtaagag atgaaagacc actgcatgag gataaggaat 180
 ctaactgagt aaggaaaata agcttaagct agtttggttg gggaagtaaa gcctaagaaa 240
 gagtaaatta ggcaagcaaa ggcagtagag aagtataata gcacaagcat gcttgaagaa 300
 aaagaaagag atttcagaaa gggaagaaaa gtcagctata gagaacaggt gaatgagaac 360

tcaaaaagag gagagcaccg aacgatcgaa gaagaaactt tgggggtaac aggttaatgt 420
 ggtgtagag aacgtatcaa gcaccacgat tgac 454

<210> 3650
 <211> 420
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-G12
 <400> 3650

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 ttgtgatact ttatcggagt tgtactttac gtcaaactgt ctaactgaac tgtcccacaa 120
 gttgaagaaa gctataagga aggggtgctgg tggagatgaa tattttgaag agttgttttt 180
 gggtttgtgt tttaattctc gtccagacat ccagacttat tcacgagtga gcagtcggac 240
 tatctatttt cagtccaatg ttttatatcg ttttgatggg aagtgttttg atagacgtct 300
 gtctagcata aagatgagct gctggataaa attcatcaga aattatcttg gcttcgatta 360
 tgcttacgta gatatgactg acggtagatg gatgttgtgt cctatgcagg tttctgtttc 420

<210> 3651
 <211> 356
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-G3
 <400> 3651

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 aagcacaaag ttgttttatt tattatttgg gcgatgatga gttcgcgcgg tctcgttcga 120
 ctgatagctg ctgcttgtga agaagctatg cgaacatgca ccaccaactg agccaaacta 180
 tcaacgtgtc atttattttc ttttaagata cattttgcga atagaaataa ttatttttga 240
 ggaatagcgt gtataattga atacttgta gattgccagt agaataaata cttgacgaat 300
 tggttgtggt taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagatca cacaaa 356

<210> 3652
 <211> 450

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-G9
 <400> 3652

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 gttttttgag tcttttagaa ctgttattga gaaacttga gcaggtccca ttgagcgaaa 120
 gtagcttctc agtgcattcg agacagaaac tgaatattga ctactcaagg aaaggagtgtg 180
 tcggaaattc ccagagtgat tatectcaag attcatgcag aggcgttcaa tttagccaaa 240
 ctttctgttc attctgtgag tcgtgttacc aagagaatag agttcttaaa gagagaatcg 300
 ctgagctcta agaagaaaat tcttctcttg cggatcgaat attttgaaca ttgttttacc 360
 aagaagtttt cttatcactt gcagcgggtt gcattcgatc ttttgttgca tgtgtgacgt 420
 tgttgtttta gaactagtct cactgtactt 450

<210> 3653
 <211> 341
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-H2
 <400> 3653

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 gtgttttgc tgtcattgtt gtccagtggc tccatggcgt ttcacttggt acgagtgaag 120
 cgtaaaggct gtttcttgaa ctgcacttga agccaaggcg agtttaattg acgggagtgtg 180
 gaaaccacgt tgttgcaaaa ttcttttcag gtgggtatatt agcatagttt gactaagggtg 240
 tgaaggcagt tgtttaccga ggatcttttg tgcgctatga tgtacaaaca attgcaacgg 300
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<210> 3654
 <211> 259
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-002-Q1-E1-H6
 <400> 3654

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acgtagcaaa ccaaagaatc tttcgtcaaa agaatgtttg gagtttccgg ttggaaaact 120
gagtcgtttt cccaaaaacg gaaactatgc cgaacgaata tgaactggat ccccagttta 180
tttggaagca attttgaaa accgaaacgc tgaagtcctt gaattggctg gaaacgcagc 240
tcgtgaaaac agatataca 259

<210> 3655
<211> 425
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-A12
<400> 3655

ggggccaccc acgcgtccga tatcaagaaa cctcgttggg taaagttgcc aagaaataag 60
aatggatccc actgttttcc tatccaaagt acccggtcat ctcttcacag acctcttctc 120
atagaggttt cctgcaagct acattcgggt gtgggtacaa cagtggcttt tctactttgt 180
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gtcgataaat attacgtcga tcaaagtatt catccttcgt ggttgcaact acgacaaaag 300
attattcgtc aagtcaacca ccaaaatagc cacgctttga taagagagat gctatccaaa 360
ttggatgatc cttataccag actattggaa ccagaagaat atcaatcgtt gaaagcaacg 420
gtaac 425

<210> 3656
<211> 412
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-A4
<400> 3656

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tatacttggg tggaactagt gcaaactaac ttattacaca acagtgaagc agaagtatta 120
caaagttgcg aacagaactt gctggaagaa cgtgaatggt ttctggacaa gaattgtcgt 180
tctgttgtgg gagctatctt atctgttctt tctgtatcaa aaaattccag tgaacaacag 240

cgtgctgcc aatctgtttt gtcgtgttg acttgtaaga ctgaagtacg tttgagagaa 300
 tcaatcgctg ctgtcgccaa tcaggatcct aaacgcaagc tgtttcaacc tttaattgca 360
 ttccttgact aggacaaacg ttcttttagct tccacttggtg ctcacatctt gt 412

<210> 3657
 <211> 433
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-A5
 <400> 3657

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 cctgtcgttt tatttcgtta cgatgcacct ttggaatata acttgatcca gttattcaaa 120
 gacctttatg attttcaaga gccttgtaga gataatatac cttggatgta ttttgtgcaa 180
 cgactggaac gactggcaga agactgtcgt tctccaatag aaagtgaata tttagagtct 240
 ctcatgaccg ttttcagact acatcacttt gtcaattatc aacacatttc tttggctggt 300
 ttggaattat ctcgttggct ttcttcacata cataatagaa aggaaatgag tgaccgcagc 360
 aatgcgagca atgagaaccg cttttgtggt attttagata aatatttatg tcaagtaacg 420
 agcgctttgt ttt 433

<210> 3658
 <211> 402
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-A6
 <400> 3658

cccgggtcca cccacgcgtc cgcaaacgcg tccgcccacg cgtccgggag catcggattg 60
 aatttatggg atatcgaatt ctatatgcta cctacgtaaa ctccaaggat cttttgactt 120
 ccattctctc cgagttgaac cgaacagaaa gaaacttggtg ggaagtcgat catgctaccc 180
 aagtttgga tgcagttgca gtgaacaact ggacgcgggtt cttcgtgctg tatgcacaat 240
 gtccctcacct cggcttctat ttaatggata agataaagga tagaatacga cagattgctg 300
 tcaaccattt gcgaaaagcg tttaaagttg acaatatcga cctcgaattt ctctgcagaa 360

atthttggatt cgagaatact gcagaatgta aagaattttt cg

402

<210> 3659

<211> 465

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-A7

<400> 3659

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agttctgcat ttgagccttc gaatatgatg gccaaatgcg atccaagaca cggaaaatat 120
atggcttgct gtttaatgta ccgtggtgac gtcgttccaa aggacgtgaa tgcagctggt 180
gcttctatca agacgaagcg tactattcaa tttgtagact ggtgtccaac gggattcaag 240
tgcggtatca actatcaagc tccatctgtg atccctgact cagaattggc taaagttcaa 300
cgtgcagtct gcatgatttc caacagcact gccatctctg aagtctttgc cagaattgat 360
cacaagtttg atcttatgta tgcaaagaga gcatttgttc attggtacgt tggagaaggt 420
atggaagaaa gtgaattttc cgaagcacgt gaggatcttg ccgct 465

<210> 3660

<211> 379

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-A8

<400> 3660

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agctcagtca accgcgcggt tctcagtttc gactacaaga cgttggtctt cctaaagact 120
ttcgttaaac ttcattttca cgtttaacgg gctgatgatg taaagttcct cagcgagaat 180
tacaaggtcg cttgagtcgt tttttgccgc aaccacacag ttgtatcccg agttacagat 240
ttggttcgga ttgctctctc cattcaagcg atctatctga tgtgtactta tcctctacaa 300
gagacttttt cattcacgct cgtggaatac ccttatacta tggcaatatt ggatcagcta 360
acgtattgtc tgatttgta 379

<210> 3661
 <211> 428
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-B11

<400> 3661

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 ccagtatgaa aggagaaacg agtgtagcac tgtctagtcg tccaactcag cgaaacagca 120
 ataactgtga aaatgcagta aactagcagt aggacggaaa gaccccataa ttcttgacta 180
 gataggttta gggaggagag agaatcatga agtagaggag gtggggtaag agatgaaaga 240
 ccaactgcatg aggataagga atctaactga gtaaggaaaa taagcttaag ctagtttggc 300
 tggggaagta aagcctaaga aagagtaa ataggcaagca aaggcatgag agaagtataa 360
 tagcagaagc atgcttgaag aaaaagaaag agatttcaga aagggaagaa aagtcagcta 420
 tagagaac 428

<210> 3662
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-B2

<400> 3662

ttcacgggtc gaccgacgcg tccgcccacg cgtccggcag aaccagcgtt tgatctcgtt 60
 ggaaagagag tccaagtctt cattagaatt ggaactagca gaggagcaag tagaaaagaa 120
 acagttcgaa tgtttcttac agcatattcg attggaaagg ttggaaaaaa atgtaatatt 180
 tatagaaaat gagtggagta gtggtcttat tagtatgcag tgatagaagt tgttggcacc 240
 tttattaaaa gccctcagtt gggaagaaag atcctggagg acggcctccg tgcgaaatagc 300
 cactgactcg ttgcggagcc aagcgcttag cgccgttaat actttgcgag ttcaagactc 360
 tagagatatc tatgtcttgg tatagagcac agctcgact ctccatactg gatgcacaac 420
 tagaactttc cttcgttcgc 440

<210> 3663
 <211> 465

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-B6
 <400> 3663

cggggtccacc cacgcgtccg cagacgcgtg gggtcatatg caagaaacgg agtttttgc 60
 tcatggaggc gatattcggt ggcttgagtc cgatgagaat gttccaccaa aacttttagt 120
 tattcgtgaa ttgaatgcaa tcttagctca tcaaccttgg ttattgaaaa gtgagcactt 180
 gcaaagacta gctcatccag cttcctcttt ggggtggtcaa gtttcgtggt ctctaagtga 240
 atgtgttttg gctattctca tatttagcca ttttctctcg ttggcagggt ttattgaagg 300
 atgtggactt tgtccagata ttgatatgga tagcagagat tctcttgtag gtcttttatt 360
 gacacgagaa caggatggcg gtggaacaga agaagaggag atggcaacaa agacaaatga 420
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<210> 3664
 <211> 364
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-003-Q1-E1-B7
 <400> 3664

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 tctttctctc tttccttacc gctgccgcag ttgcagccga cgtagtttca gaggagagat 120
 ggggatatgc tcagcaaacc caacaacagc aacagtgcc acaagtatgt aaacagtatg 180
 catactatca gagtccagtc tgcacttccg taaccacaca gagcccatatc tggacccaat 240
 gctcgaagac tgtgcaaacc tttgtcccaa gccagtgcag tacttatacc caatctccta 300
 catggaccta ttgcagcann ctacacacca ctagcgtacc atctcaatgc agcaaggccg 360
 tgac 364

<210> 3665
 <211> 389
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-003-Q1-E1-C10

<400> 3665

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aaaaaatggc ggtccaaact gtaaggatca aaaggtacca aattaaataa acttttgaaa 120
ggcttcaatt ataaaaggaa aaacgattgt aacactgtct agtccgtcca actcagcgan 180
acagcaataa ctgtgaaaat gcagtaaact agcagtanga cggaagaac ccataattct 240
tgactagata ggtttaggga ggagagagaa tcatgaagta gaggaggtgg ggtaagagat 300
gaaagaccac tgcattgagga taaggaatct aactgagtaa ggaaaataag cttagctag 360
tttggtctggg gaagtaaagc ctaagaaag 389

<210> 3666
<211> 434
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-003-Q1-E1-C4

<400> 3666

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tctagagaaa ggcaagaaag aaaagaaagg aagacacagt aaatgaggcg agaaagcata 120
ggaagtgaaa cggtattagga acccggttag tctatgcagt aaaagaaaga atgagtaaga 180
aaaaagggag tcattccacc aggggagtaa aggcgcaaga aagaaacca aagcaattga 240
cgggaatcgg aaaaaggggt ggatcacgta aattaatccg atataaaccg agaaccttac 300
ctctccaaga aggtgttgca cggctgtcga aagaacgtgc tgtaaagaat ggaacaagaa 360
cgaaaaanaa aaaaaaaaaa gaaaaaaata aaaagaaaaa gacaacaaaa aaaaaaaaaa 420
acacacaagt gaac 434

<210> 3667
<211> 442
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-C9

<400> 3667

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tgctgttgcg ataacagagt gcgaattgta gacacatttt ccacaaaatc tacttcccaa 120
agcaaggatt ctctaatcgc atcactgatc atcggacttt gcaaccacaa tagcccactt 180
taacggacac ttccgaagca accacagaat tctcggccac aatctttttt accgatcctt 240
ccgtcgcata accgttggaa ccttttgtgg atcaaaatat agctgaagat atcacattac 300
cctacgaaat aagtaaagaa tgggggaaca aattgggtac cgtatgaaat aatttgggggt 360
attgtttacc acaatgaaaa gatcgacgac aattgcgagt acaactcatt ctaaagctgc 420
aatcaacaac acggattgtg ct 442

<210> 3668

<211> 410

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-D10

<400> 3668

cgcgccgcg gacgcgtcgg ccgacccggc agctttggcc cgcaaaaaag gtggtgcacg 60
gctgtcaaaa gaacgtgctg tgaagtgaga gaacgtacga gaaagccaag tgaggaaaag 120
aaggcaagta gagggcggcc cgagaaagga gagggcgtaa gacgtgatac agagtaggaa 180
gaaaagagaa gagagctaga aaggaggtaa aagaagagta aaaggactag aagaggtacg 240
gaattcacga ggaacgagcg tgaaggaagg aggaatccca agtaatcgac gaagaaaaag 300
cttcggtgaa agcgtgaacg gattttgtac aactgcccg tcaagttctg gaagtgtgct 360
aggaataagc aggagaagta caagagagta cgaaaagaag aaaggaagtg 410

<210> 3669

<211> 279

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-D3

<400> 3669

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attcttcaaa gaaagaagcc acaagtaaac ctgcagcagc agatgctaca aagacgacag 120
aaaagtctgg tccggaagcc aagttgaagg gaactggtgc aaagaaacaa taaaaagttg 180
actatgcatg tgcagtcttg ttatgttttg tgagttctgt ttgatagttt ccagctattc 240
ttttggtagt gaataaagag aaaatttttt ataaaagaa 279

<210> 3670
<211> 277
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-D8
<400> 3670

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cgccaaaggt tgcttcttct tcataagaaa gttatatact tttctccatg tcttgatatg 120
agtcccgttc tcttcttttt atctatatat aaataaatgt gttttcggaa tcaagtttca 180
aggaaaaaaaa aaaaaaaaaa aaaaaaaaaa agaaaagaga aaaaaaaaca aaaagaacaa 240
ggtaaaaaag gggggcggtt ctagaggatc aaagctt 277

<210> 3671
<211> 427
<212> DNA
<213> Cyanidium caldarium
<223> Clóne ID: LIB190-003-Q1-E1-E12
<400> 3671

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tcgacaatcc tatcggcatc aagtgtggac catctttggc agtcgatgat ttacttcggt 120
tgttggatat tttagatcct gataatgagc ctggacgtat tacactgatt gttcgtgttg 180
gagcaggtcg agttgccgaa catcttccaa ggttttaga agcagtgcgc aaggaaaata 240
gacaagtggg gtggagttgt gatcccatgc atggcactat ggaaacatcc aaatctgggt 300
acaagaccag aagatttgag aatattctgt cagaggtcaa agaattttat gaaattcacc 360
gtcaactcca ttcctatccg ggtggaattc atttggcaat gactggacag aatgtcactg 420
aatgtat 427

<210> 3672
 <211> 391
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-E2

<400> 3672

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 tttgtcacct caatcgggtga acaaagtcgg aagattgtgg agtttgagtt ctctgtgtatc 120
 tagttttttcc gacaagattg gttcacagtc tcattttctc catttcgtgg accgcagccc 180
 agacgcgtct cgtcaccgag caagtcccag gggacgtgaa agggctgatg caggtccagt 240
 gatgtcaaca gcgaaagttt atccggactt cacgttaaaa gaaccaggg aatatgggac 300
 taataaaacc ttggaaattg gccgaattaa cggcaaaaat tccaaattgg taacaaaatt 360
 gggaaagggc aatcacgtta aattttttaa a 391

<210> 3673
 <211> 368
 <212> DNA
 <213> Cyanidium caldarium

<223> . Clone ID: LIB190-003-Q1-E1-F1

<400> 3673

gagacaaaac gaatactaca tgatgacttc caaagggtgc aagatcccat gtctcaacag 60
 gatttactag tggcaatccg acagactgta cagcagttgg aacaaatatt tacagataga 120
 tatccgtcaa tgccatcggt ttggaacgcg ttggatcgaa atgttgacaa aacgtttcgt 180
 tccgctttga gttgacgcat agaagattca catgaaggag gatagtgaat gacaatgtga 240
 gtgagctgca tggacgatag atcgttgggt cttgaaagaa atttacttct agacgagaaa 300
 gcagtgtgaa tttttactaa acagttttac taacaacgaa aatttttcgcg cctggatagg 360
 aattggcg 368

<210> 3674
 <211> 444
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-F11

<400> 3674

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gttattgcat cttatgcagc agttgtatcc gaaatggcat ccaatgagtt tcaaagagga 180
ggatacgtc cttctccttc caaggaatgc tgcataacca cttgtcaata tgcagaactt 240
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ggccaagctc cttctacaa tcaatattct tcttcgtacg gttcctctag ctatcgtctc 360
ttaactgcag acgaaaacca acttgtgagc agaggagggt atgcaccaac caaccaatgt 420
attctagttc ctatccaatg ctgc 444

<210> 3675

<211> 416

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-F12

<400> 3675

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ttggattcca aagagtctgt tgtgaccata tatttggaca aagtgaacaa aatggagtgg 120
tggcctaagg tcgttaagtc tgagccagaa attgacactt caaagataga acctgaaaat 180
tccaggttga gtgaccttga cccagagaca agaagtatgg tcgaaaaaat gatgtttgat 240
cagaggcaaa aagctgctgg actcccaact agtgatgaac ttaaaaagaa agaactatta 300
gcaaagttta tggaacagca cccagaaatg gacttttcac aagccaagtt ttcataaaga 360
aagacagacg aatggaaacc aaaacaatcc gaagaagcca gttttcgcgc ctggat 416

<210> 3676

<211> 490

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-003-Q1-E1-F7

<400> 3676

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cgtaatgtca ttgcctagtt ggatacttgc ttcacacaag atagaaaagt tggatttgaa 120
ttggttgga gaggatattc ctagttttga ctatggtgct caagcagtag gtgacaagtg 180
gacaactgcc acactctatg ccaagtctca aggtgtattg gcaggcaaac cattctttga 240
tgccatcttt caacatcttg gttgcacagt gcagtgggaa gagtcctttg atgatggacg 300
ttgtttggat ccctactttg tctctctc aggcgtggaa aatggacttg gaggattgtt 360
gacgctggca agaatacaag gaccagcttg taacatatta cgtggagaac gaaccgcttt 420
aaatgtattg gcacgttgta gtggaatagc tactagagct tttggtttga gtcgattggc 480
acaacaacac 490

<210> 3677
<211> 372
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-F9
<400> 3677

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acttgggctg gtaaaaaaac taaactaacc aaataaagta tgtaaaaaac attcttattc 120
cttgacaagt tttagatagg aaactacaaa atcattcaac aatcctataa agtatcacgc 180
ctaagagaat gcagcattga attaaaaaaa aaaaaaaaaa aaaaaaaaaa ataaaaaaaa 240
aaaacaaaaa aaacaaaaaa gaaaaaaaaa aaaaaaaaaa caaacaaaca ataaaaaaca 300
aaaaaaaaata aaaaaggaga aaacaaaacc aaaaaaatga acaaaaaaaaa aaaaaggggg 360
gcgcccccaa aa 372

<210> 3678
<211> 433
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-003-Q1-E1-G11
<400> 3678

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gtcttatgga agcgtctcag cgatggactg gtcgatatat ccaaaagtgc cttctcactt 120
atccatcact tggacagttg agtagtaa at ggcgccactt ttccacagca ccttgggtac 180
aagatacttt ggaggaatat ttacgtttc ctagagagag tgaaagaa at aactacgcag 240
tgaattggtc gttggcaaag ataggagtgc ctccaaaggg tgaagttttt tacaacgtgc 300
cttcgaggac gattgttgcc aactcgctg gaaagcttag ccgtgagagg aggcaactgt 360
tgggtcccca tcaaaagacg ggcaacttcc aggaatttgt cctaggaa at aacttganac 420
cgagagaata tgc 433

<210> 3679
<211> 449
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-G2
<400> 3679

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attgcttcag cttttgtagt tgttttctcc aagtcttggg gccctttttg tgatagagta 120
aagcagctgt ttagatcctt aggagtctct ttcaaagtaa ttgaattgga tcaggagaaa 180
aacggttcag ccattcaaag tgcattgtat gaattgacga aacagagaa cgttccaaac 240
gttttcataa acggacagca cgttgggtgt tgtgaccagg ttatgcaact ggaaagaaaa 300
ggtacattga aaaagttact tgagcctgtt ttgacggcct aaaatgcgtt atctactgcg 360
cagccatata gttgccgctc cagtcttcta tttagaacag aaactcaagt catgaaattt 420
ggaaaataaa cagccgacat tgtctttac 449

<210> 3680
<211> 472
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-003-Q1-E1-G5
<400> 3680

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tcagcttggtg gaccgaacaa tgcgaatac gattccacat ttactgcatc caattccatt 120
gcttatcatg actgtttggg acagtctatt gtacaatatt gtcgtgtcat tcccgatggc 180
attatttgtt tctttccctc ttatcgttta ttagaaaatg tggttcgacg ttggcgtcaa 240
tgcatatatt ggaaagaatt ggaaaagtgc aaacaagtat ttatcgaacc gagccatcat 300
gaccgaggtc atttcgatac cattttactc tcttattatc atgccattca caagaaagaa 360
ggtgccttat ttttagcagt ttgtagagga aaagtaagtg aaggaattga tttcaaggat 420
gagtttgac gangagtgat aattgttggt ttaccttttc ctaatttgag ag 472

<210> 3681
<211> 435
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-G9
<400> 3681

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aaggtgtgaa atggcagtag ttgaagataa cagagtcttt gttggtggtc ttccttggtc 120
agttagttaa gaagaccttc gtgaaacttt ttccaaatat ggagaagttg ttgatgcaag 180
ggtgaatata cgtgttcctt ttgttttggg ttaaacttgg ctcccttgac tacctgcacc 240
tattctcggg ttccctttta tttgccccat agttagtgtc actatctagt cgcagtgttac 300
tttgagaggg tagagagctt ttctagttac tttataactg ttcacacttg ggaaccctcg 360
aaaatagtgt gaaggatatg cagttggggt gactagtgtc caccaaagtt gttgttacta 420
tatagtgtc acaat 435

<210> 3682
<211> 322
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-003-Q1-E1-H11
<400> 3682

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cgtccgccca cgcgtccgaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggaggatgat ataaaaggta aaaaaattaa 180
 ggtaggcttt cataaaagtt caaatctttt ttatggttga atgtaattta aaatctttgg 240
 aagtggtttt ataaatttaa tttctgggag ggtcttttta aaagctagtt tttgggaaat 300
 ccttgagatt tcccttttta aa 322

<210> 3683
 <211> 296
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-003-Q1-E1-H4
 <400> 3683

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 aagagtagtg aaggtagcga aggccagggt ggatagtcga gagggaaaaa gcccagaagc 180
 caagataagg tatcaaagta aagaaagaag gaaaaggaga agaagagagg gtaggcttag 240
 aagcagcaaa ccagagagga aagcgttaaa gcatgaaaga aaagaaatcc gaaaaa 296

<210> 3684
 <211> 322
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-A1
 <400> 3684

ctgcccgtac ggtccgagat tcacgggtcc acccacgcgt cegtacaagc ttccaaattg 60
 tttgaaagtg tgctgtcatg actaagccat tttgcattgc aatcgcgact acatttatgt 120
 ttacaaacat gccttaccga atgtcatcta ccgacctagg tgaacccatg cacagtacga 180
 ctgcattgtc caacattacc caagcgggtc tcttcacaga tatcgacttc acatgggtcta 240
 tagaacgtgt cacagttaca agcgtccca acgcaaactc aatgtcagtc acatttgacg 300
 gacagttgat taagtcagca tc 322

<210> 3685
 <211> 454
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-A5

<400> 3685

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aaggcgcgta aaccacgcgt tcatatcttt gatggctcctt ccagtgaaga tatgcccttt 120
tttatggagg aaataaagaa aataaagttg gcagaacttg ctatgttgaa aggagaagaa 180
gaaggaggag aaaccggcca cgcagaagcc ctagcagggg aagcttctga accttggcat 240
aacaactggg atgttgctca cttggaacaa gaggaaaagg aaatacaaga cttgaaagaa 300
gaaatagaga gacttcaagt cactaagaag gaattgtttc agcaactaaa ggaagtcttg 360
atggaagaaa ggcgggataa gagagagacg acactccctt agttgtgttt gtacaagtct 420
attttacaag ctctctttat gaacctttcc aact 454

<210> 3686

<211> 476

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-004-Q1-E1-A7

<400> 3686

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agtgtactgc gatcatttta gaaccccaaa tgccttgagt cttgctagtt ttcttttata 120
gagaagaaaa tatttgataa gaaggcagga agaaatgcac gggcactaat atgtgctgaa 180
atatttttga aatactagat tgtgtcttat ttgatgacga cagaaggctt cttgttctga 240
aatggccctg tcctgaaaag tcgatatagc taagggataa ctctaagagg tgtttaatgc 300
cttgtgtttt ccaccatag acacgacact tgttgaaaag aatcagctgc caaattgtgt 360
tttgattcgt ttgtgttaaa gttgttcagt gcttgatgaa caaagagggt ccaaagcctg 420
caatagaagg agaaaattta ctctcactga gaactttcga ctgatcagag caagat 476

<210> 3687

<211> 316

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-A8

<400> 3687

ggggccaccc acgcgtccgt aggggaatttg ttttggtgaa ccggcaggat ttagagaagt 60
atataatcgg gtttcctgga attgctggca gtggagttag cgctggagaa cgtgcagtag 120
aagccctggt aaacgaaacc ctatatgtta atgtagatct cagggacttt ccccgttttg 180
atggggaata ttttatacct acgcttttaa agaagattag caaagaagct ctttccacgc 240
taccaaataa gccagaattg ctgcctaaag ttttaaagaa taagaaagac ccaaaaaagt 300
gggtaagccc cttaat 316

<210> 3688

<211> 398

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-B1

<400> 3688

cgggccgaaa ttcacgggtc gacgcacgcg tccgggttac caaaggagat aacgggaaca 60
gctttaacct ggttcctatt gatcatggtt ttatcttacc agacaaattt caaagctatc 120
cttgccctgt ttggatggac tggcctcagg taaaggagcc ggtttgcgaa gatgtaaaga 180
gatatgcaga aacgctagac ggtgaaatgg acgctcgtct gatcttggac gaaacagatg 240
gcagactgtc aaagaatagc ttaagaattt tgcgcataat gactgcgctt cttcagagag 300
ccatggagaa gaaccttact ctgtatgaag tcggttcctt tgtatatgtc cgcatcccg 360
acacagagga aagcgagttt tcttccatta tgcgagaa 398

<210> 3689

<211> 393

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-B4

<400> 3689

ttcccggggc caccacgcg tccgcagacg cgtcggggaa cacatggggg aagatataat 60
tcaagatgca gtacattgtg ctagaccttc tgatcgga aattgtcctc aacagcgtgc 120

ataagtgcc gcacaagttg caccacgtta tgcacgaagt tttgcacata taccaggaga 180
 taatccaagg atgactctaa agatgacgcg aaacttgaag catcacactg agcagcatct 240
 ccatgcggtt cacactgcgg tatcgtcgat ggattcaggc attgaagcac agttcaagta 300
 acagatcggt tagcacattg ttttgcacat gagttacaat gagatgtata tagcatggag 360
 tgtaacaggg aatgtagatt attagcgaaa aca 393

<210> 3690
 <211> 478
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-B6
 <400> 3690

taccgggtccg tacattcacg ggtcgcagca cgcgtccgga agagattaga tagagcacct 60
 gtcattgcta ttaaacgcat tcatatggac gagaaactag caaaagctgc ggaatacgcc 120
 ggagctcacc ttgttgaaga acgttctgta gaaaatgcag tttttgacaa tgtcaaaaaa 180
 gtatggaggg tgaatacagt aaaggaagat ggatcgaaag aggaggaaac atatacagga 240
 agaattgttg tttgtgcgga tgggtgctcct agtcgacttg cgatgaagtt agggttggta 300
 tcctcacctc cacaggggtac ctgttccaga acctttgttg aaaggaaaaa tcaaaatttt 360
 tggacagacg ggcctgtaat ttatccaaga gatttattgc ctggccattg cgagttttt 420
 cgtcaaccaa atgatgaact gaacctttgt ccctaaaata atcctggaaa tccaaaag 478

<210> 3691
 <211> 455
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-B7
 <400> 3691

ttccgggtcc acccacgcgt ccgcaatggt gcaaaaatat tcgaccacta tttgccgcac 60
 cactaacgac aagccacatg ttgtatgcta caaagaatag ctggctgacc attccatctg 120
 gctgcacgct tctatgtcgt agtgcgttta ccacagggtc catagcagca gtttcggaaa 180
 gcgatccttc taccgtcca atgtcgaaaa ataaaaaggc aacgaatatg gaaacgcagt 240

cttttgtggt gagcgtgacg gggttcagacc gagtaggcat cgtacacgat tttagttggg 300
 cactgaaaaa tatttctgcc aatgtggaat cgagtcgaat ggcttgtctc ggtggcgact 360
 ttgcaatgat tgtgttggtc agtttgaata agaaggatgg aaggttgata cagtcgacgt 420
 tagagtcagc cttaccaggg tttcaaatta gtact 455

<210> 3692
 <211> 356
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-C1
 <400> 3692

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 acaacgacag cacctaaacg agcagatgtc ctgaactgga tacaagagtt tggtaacaag 120
 atggatttat ttgaaaatta attggaaact ttttcagaat acacaaattht caaataaaaac 180
 agatattatg taaattgttt cagaaaggaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
 aaaaaaaaaa gaaaaaaaaa caaaaagaaa aaaaaaaaag gggggcctcc ctaaaagatc 300
 aaaactttgg tacacgggca cccaaattca aatcactgcc acgggggtca ccaaaa 356

<210> 3693
 <211> 351
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-C10
 <400> 3693

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 tggagtaaac agaaaaggaa gtaaaaggag ggaatgaagg gaagttatgg caaaaacacg 120
 tgccagcagc agcggtaaaa cgtgtgtagc aagcgtagag cagaagaact ggggtgtaaag 180
 gtcgagtagt agagtaagtg taaaagggaa aggaaaggag agaaagagga aagggatgaa 240
 atgcagagat ctctagagaa aggcaagaaa gaaaagaaag gaagacacag taaatgagggc 300
 gagaaagcat aggaagtgaag acggattagg aaccctgtga gtctatgcag t 351

<210> 3694
 <211> 355
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-C2

<400> 3694

tccgggtcca cccacgcgtc cggaaagtta cagtggcttg gtaaaactgc ttttcgttag 60
 tttttacgtg aaaaaaacc cttctttttg agtgaaataa ggctttacgt catctgtggt 120
 cgtaccttag gcatattgtg acatacttgt ccagatctag tgaataaact acatttttaa 180
 acaaaaaaat aaaaaaaaaa aaaaaaaaaa aaaaaaagga atacaaaaac aagaaaaaaa 240
 ggtcagcccc ccgataggga acgacataga gtaagagtaa agtcaacttg aaacacctga 300
 tatgtcctcg actcagagcg gctcacagga cgacgatata tagtgacttt tcagg 355

<210> 3695
 <211> 462
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-C3

<400> 3695

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 ccgcccacgc gtcgcgccac gcgtccgccc acgcgtccgc ccacgcgtcc gggaaaccag 120
 gttatgagaa cttgtgttct cttgccgtca tttcgaagac caacaccaac ttccgaactg 180
 caggagttag tagagtgcct ttgaaagata gacacggaca aataaccca aatgtttctca 240
 caggatgtat ttcttgtgct tcgggtgacg gtgggtcccat ctggtgggac gatcctattc 300
 cagataatct gttgcaaaaa ctgaaagagt tgggtcagct gcctccagag gaagaagaaa 360
 agccgagcga cgacaaggag gacgaaaaga aggagcaaga agagacgcaa ccaaaggagg 420
 aagaagagaa ggaagaaact gttgcaagtg acgagagacc ag 462

<210> 3696
 <211> 456
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-C5

<400> 3696

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gaagtagaaa gaagagagtg taaggcggcg tcataataga aatccgaaag gagtagaaga 120
aaagagagag aagaaagaaa agaagagaaa aagcccagaa gccaagataa ggtatcaaag 180
taaagaaaga aggaaaagga gaagaagaga gggtaggctt agaagcagca aaccagagag 240
gaaagcgtaa aagcatgaaa gaaaagaaat ccgaaaaaga agagaaaaag gtaagaaaga 300
ggaccgaatc agggtaagag gtagaggagc aagaagagaa gagagaatgc tgggtggagt 360
agcgaaacaa gagaaggga gtaaaaggta agaaagagga aaggtttacg agagaaggaa 420
gtagaaagaa gagagtgtaa ggcggcgtca taatag 456

<210> 3697

<211> 232

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-D1

<400> 3697

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tttagttctt gtcgtgaact actaaataaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaggg cggaagccca aaaggatcaa accattactt 180
acgcgtgcat gcaacgtaca tatctcttca atagtgtcac ctaacttcaa tt 232

<210> 3698

<211> 356

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-E1

<400> 3698

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tgagcatgcc gccgcaagta gaaacaagta caccttcttg tattgcagta ggctgaata 120
aaggacacgc cgttacgaaa aggaaatctt caaccaaagg actgaaaagg gagaaaaaaa 180
cacgccaagt ttgtacgaga aatcatccgt gaagtttgtg ggtttgctcc ctatgagaag 240

cgaatcatag agttgttgag agttgggaaa gataaacgtg cgctcaaata tgcgaagaaa 300
gaggcaaata cgggaaagca gtaaaagaag aaagagaaag aaaaaaactg agtatc 356

<210> 3699
<211> 373
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-E4

<400> 3699

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tgtgtcgttg cctcatggga cgtattacgg agtgggaacg acccgttcct cgtaaccag 120
ttatcgaccc aaaacctaaa acgggtaaag taaggagcaa tttggatcca accgaatacg 180
gtagaaatgt tttgctact tccaatgggt gcaataatgg tttgacttca gctacaagaa 240
caacaagaac aagtagtgta ttcatgggag ggctttccgg tttttggggc tctaaaacgt 300
gggcttatat gtccactata aacaaaactca cagggatgaa agataacggg ctcggtcgta 360
taccgatcga aat 373

<210> 3700
<211> 449
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-E5

<400> 3700

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aatacgggaa agcagtaaaa gaagaaagag aaaggaaaaa actgagtatc aggaagaaaa 120
gagggagtag atgaggaaag aaagatcaag gaagtaagag taagagaagg agtaatgtga 180
atgaaagcag gaaagtatth gaagaaagag gcaaatacgg gaaagcagta aaagaagaaa 240
gagaaaggaa aaaactgagt atcaggaaga aaagagggag tagatgagga aagaaagatc 300
aaggaagtaa agcctaagaa agagtaaatt aggcaagcaa aggcattgaga gaagtataat 360
agcagaagca tgcttgaaga aaaagaaaga gatttcagaa agggaagaaa agtcagctat 420
agagaacagg tgaaggagaa ctcaaaaag 449

<210> 3701
 <211> 472
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-E6

<400> 3701

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 tggagctttg tagacaagag caagaaacaa ttatggaagc tgtaaaggca gaacggaaag 180
 ctcttcgaga atggaaagag aagagacgaa attggattca acgaataatt cttcagcaca 240
 ccaaaacaac cgcagcgacc aaatagacat gaggggacat ttggaaattg gtttgctgcg 300
 tcggtgaagc gcacggaaat attttctagt catgcaaata tttgtgaaaa cgttgacagg 360
 aaagaccata acgttagagg tcgaaccttc ggatactata gaaaatgtga aatcaaagat 420
 tcaagataaa gaaaggtata cccctgatta acaaaaaaca acacaaggca cc 472

<210> 3702
 <211> 292
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-E7

<400> 3702

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 agtcaagaaa cattagacgc tgaagaactt caacaaagga agagcatgaa taagtcgagt 120
 tcggaacgac caaaagaaaa tgttgagct gcatcatagt tgagtttggt tctatcataa 180
 acttattatt caacgtggcg tacttgttta cgttgttcca ctttgtgtgg tttttcttt 240
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acctaaaaca aa 292

<210> 3703
 <211> 368
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-E8

<400> 3703

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tagccttgga aacaatgaag aaaggagaaa aggcgattgt gactatttca cctaattatg 120
cctatcaggg agttggaata gaggctccac caggtgtttc aagagatgct acagttcaag 180
tagaattgga actggtttca tttgaaagag cgaaagagtc ttggaacttg tccaaggaag 240
agaagattga aaactcgatg cgcattaaag aaaagggcaa tgagttgttc aagtctggta 300
gatataaact tgcgaagaag aagtatgaaa aagtgataag cgatttggag tttgatgtgc 360
gtaacaag 368

<210> 3704

<211> 430

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-F12

<400> 3704

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gcacggctgt cgaaagaacg tgctgtgaag tgagagaacg tacgagaaag ccaagtgagg 120
aaaagaaggc aagtagaggg cggcccgaga aaggagaggg cgtaagacgt gatacagagt 180
aggaagaaaa gagaagagag ctagaaagga ggtaaaagaa gagtaaaagg actagaagag 240
gtacggaatt cacgaggaag gagcgtgaag gaaggaggaa tccaagtaa tcgaggaaga 300
aaaagcttcg gtgaaagcgt gaacggattt tgtacacact gcccgtaag ttctggaagt 360
gtgctaggaa taagcaggag aagtagaaga gagtaggaaa agaagaaagg aagtgaagac 420
gtaagacgtg 430

<210> 3705

<211> 354

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-F3

<400> 3705

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agaaaagaga aaatgtaaag tatagagtgt gcggcctgcc aaatagtaga gaagaaatcg 120
 atgaaagtga aagcgagtaa aagatgaggt atagagaatg gcggtcctaa cggtaaggat 180
 ccaaaggtag cgaagtaa atagacgtttga aaggcggtcca gtatgaaagg agaaacgagt 240
 gtagcactgt ctagtcgtcc aactcagcga aacagcaata actgtgaaaa tgcagtaa ac 300
 tagcagtagg acggaaagac ccataattc ttgactagag aggtttaggg gaga 354

<210> 3706
 <211> 429
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-F9

<400> 3706

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 aagacacagt ggatgacgca ataatcatg cgaagtgaca cgggttatga acccggtgtag 120
 gcaacgctgt aatcgaagca atgagtaaga gaatggggag tcattccagc agtggattca 180
 ccagggaagt aagagcccca gagcaattga cgggactcgt gacaggggggt ggatcacggg 240
 gttgattccg ttaaaccgac aaccttacct ctccactaac gtctcgaca gcggtctaca 300
 gagctttctg tgaaatgtga tatcgtatga gaaagcctac tgaagaaccg aatgcaggt 360
 aaaggcgccc tgaaaaacga cacggcgtaa gacatgacat agaatatgaa gcagagttag 420
 gagagctag 429

<210> 3707
 <211> 378
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-004-Q1-E1-G10

<400> 3707

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 aggaacccgt gtagtctatg cagtaaaaga aagaatgagt aagaaaaaag ggagtcattc 120
 caccagggga gtaaaggcgc aagaaagaaa cccaaagcaa ttgacgggaa tcggaaaaag 180

gggtggatca cgtaaattaa tccgatataa accgagaacc ttacctctcc aagaagggtg 240
 tgcacggctg tcgaaagaac gtgctgtgaa gtgagagaac gtacgagaaa gccaaagtga 300
 gaaaagaagg caagtagagg gcggcccgag aaaggagagg gcgtaagacg tgatacagag 360
 taggaaaaag aangaaaa 378

<210> 3708
 <211> 266
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-G4
 <400> 3708

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 attcacacag agtgtagctc taatatggac ttgaaccag agatgagttt tcgtttttcc 120
 gcctggttct cgactcctgt tggtagcaca acttgagtag ctttctctcc ttttgtcaaa 180
 gcagtcttct tgttcttctt gcgtcaagtc ttttgttcgc gattagcctg cttgatttgt 240
 tttttaaaaa gctacaaact ggggta 266

<210> 3709
 <211> 369
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-G6
 <400> 3709

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 ggaggtccac aaatgttaca actttctctg gatggaacga gactgtatgt aaccaattcc 120
 ttgttcagtt cttgggataa ccagttttat cctgaaatat cggatagagg ctctatttg 180
 gtaaagggtta attgtaacac ggaacaacgt ggaatggaac tcgaccattc cttctttggt 240
 gacttttgga aggaacctgg tggtccttgt agagcacacg aagttcggta ccctgggtgga 300
 gattgtactt cggatatttg gatatgacct agttgtaaga tgctatagtg aaggtagttg 360
 tttgcttcc 369

<210> 3710

<211> 345
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-G7
 <400> 3710
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 gcagccaact aaatacaacc acaagctata cattcaggtg ctactcgaca acacaagtca 180
 gtacgcaaca tatcgtttgc atagttccaa gcacgttgca aaaaggactt ccaatgggcg 240
 tctccagcgt ccactccgga gtgactcctc aaagtgttga tatataccaa aataaacttg 300
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<210> 3711
 <211> 400
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-G9
 <400> 3711
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 ctgcggtaga acatatgaaa gaagcagcac cgactgttta gcaaaaacac agcactctgc 120
 agaaaagaga aaatgtaaag tatagagtgt gcggcctgcc aaatagtaga gaagaaatcg 180
 atgaaagtga aagcgagtaa aagatgaggt atagagaatg gcggtcctaa cagtaaggat 240
 ccaaaggtag cgaagtaa atagcgtttga aaggcgtcca gtatgaaagg agaaacgagt 300
 gtagcactgt ctagtgtcc aactcagcga aacagcaata actgtgaaaa tgcagtaaac 360
 tagcagtagg acggaaagac cccataattc ctgactagat 400

<210> 3712
 <211> 270
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-H1
 <400> 3712

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 cttttgagag gtccgaaaca cgctcgcgaa gtttataaac actttgctgg tgttgctgtg 120
 gaaggtcacg tgaagcetta tgttcgaaac aaggaaagga agctggaaag agctcgtgga 180
 cgacgtccaa gccgtggttt caagaggaag ccaaagaagg tgtagttgtt ctatactttc 240
 tataaatata caagttttcc tagtcaaaaa 270

<210> 3713
 <211> 429
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-H10
 <400> 3713

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 tatttaggat ttattcttgc tgttttgttt gttcctgaat attccaatgt tggacttcgt 180
 ggggaggaca agcgttattt ggagttgaga actcgttatg ctgctcgtct agccaagaaa 240
 tatggagtgg aacctgccca tccggatgac caagaagcaa ctcgactagg tcgtttctct 300
 gtatggaacc tcatttcacg caagttgacg ggtactccgg aaagttttga agaagccaag 360
 aaagaatata ttcgtatgtt gttgtctcgt tgttcgttgg aaaccaatga acaagtggaa 420
 tattatgca 429

<210> 3714
 <211> 267
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-004-Q1-E1-H3
 <400> 3714

ttcccggttc caccacgcg tccgcagacg cgtccgtgat tgtgatacca ttaagagctc 60
 gatgatagat tgtttgaccg aacgtactgc gcacctaaact ggggtttcct gtgactaaat 120
 gaatcccgca catacgtttg ctcttcgaat tgtttatgat aacagtgtaa tttcaacgct 180
 cgagttggaa catcatgtcg gtaattaagg atctaaactg gactcctcga caaattcgag 240

tactccacca actattccta atatatc

267

<210> 3715
<211> 339
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-004-Q1-E1-H6

<400> 3715

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tcagcaaacc caacaacagc aacagtgcc acaagtatgt aaacagtatg catactatca 180
gagtccagtc tgcacttccg taaccacaca gagcccatatc tggacccaat gtcgaagac 240
tgtgcaaacc tttgtcccaa gccagtgcaa gtacttatac ccaatctcct acatggacct 300
attgcagcac ctacaccaac actagcgtac cacctcaat 339

<210> 3716
<211> 217
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-A12

<400> 3716

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ggaattcacg aggaaggagc gtgaaggaag gaggaatccc aagtaatcga ggaagaaaaa 120
gcttcggtga aagcgtgaac ggattttgta cacactgccc gtcaagttct ggaagtgtgc 180
taggaataag caggagaagt agaagagagt aggaataa 217

<210> 3717
<211> 416
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-A3

<400> 3717

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agttcttctt tttatgatat ggattctctc aaggtttctt ccgagtcaaa tctaaagagt 120
 gttgtcgatc aaaagagtgt gcaaggatct gccaggagg taattagtaa tggcagtga 180
 atttcacgga aaactgttcc aaaagataat atgcagaatg attattctgc ttggcaaact 240
 ccttcgacag gaaaagatac aattgtaaac tcgacatcga aaggtgtttc atggaagatg 300
 aatccgcaag gaatggaata tacttcggca gaaacgactg gagttgtcta tagtggacgt 360
 caacctaaac ctgctgtgga taacaactca caagactatt cgagaatgga cacttt 416

<210> 3718
 <211> 272
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-005-Q1-E1-A6
 <400> 3718

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 taaaaggact agaagaggta cggaattcac gaggaaggag cgtgaaggaa ggaggaatcc 120
 caagtaatcg aggaagaaaa agcttcggtg aaagcgtgaa cggattttgt acacactgcc 180
 cgtcaagttc tggaagtgtg ctaggaataa gcaggagaag tagaagagag taggaaaaga 240
 agaaaggaag tgaagacgta agacgtgaaa aa 272

<210> 3719
 <211> 375
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-005-Q1-E1-A9
 <400> 3719

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 agaaatcgat gaaagtgaaa gcgagtaaaa gatgaggtat agagaatggc ggtcctaact 180
 gtaaggatcc aaaggtagcg aagtaaatag acgtttgaaa ggcgtccagt atgaaaggag 240
 aaacgagtgt agcactgtct agtcgtccaa ctcagcgaaa cagcaataac tgtgaaaatg 300
 cagtaaaacta gcagtaggac ggaaagaccc cataattctt gactagatag gtttaaggan 360

gagagagaat catga

375

<210> 3720
<211> 266
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B1

<400> 3720

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gtaagtatag gttttggatt tggaagaaac aaggtacttc aagtagtctt ctttgttggtg 120
tataggatag agcataactt ctaaacttat ttatttgact tcaattgaat tataataaaa 180
cattttttga ctaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acaaaaaaaaa aaaaaccaa 240
agaacaaaaa aaaaacaaaa aacaaa 266

<210> 3721
<211> 308
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B10

<400> 3721

cggggccacc cacgcgtccg cacacgcgtc cgcggacgcg tgggcggacg cgtgggggtga 60
tccaactcga gcgtatcgaa aagaagcaac gagacattgg atggtatttc aacaacacgc 120
cgaaagagac agagcttgat gaaggcactt acgttggttg caacggattt ggcataaaga 180
gtttcatgga ataataataa taataataat aggagactcc tttgactcaa taaaatgcga 240
gacaaaatta cacaaaggga taaccttcgc cttagctattt ttacgctcct tcataaacat 300
accaatgt 308

<210> 3722
<211> 210
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B11

<400> 3722

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 gaaaagaggg agtagatgag gaaagaaaga tcaaggaagt aagagtaaga gaaggagtaa 120
 tgtgaatgaa agcaggaaag tatttgaaga agagagtgtg aagcgcgtag cttttgcata 180
 atgtcccagc gagtgaaaga ggaagcaaaa 210

<210> 3723
 <211> 351
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B4

<400> 3723

gtcgaccgac ccgcccggtg tctttgagtg gagctcctag aagaatactt gtttggttct 60
 ttgcagactt gagagtggag gacaatgaag ctttgatcaa agctgcacag aatgggtgctg 120
 ttccccgggg tctagtatta cctctagtgg cgctgcataa agaaattcca aggagtgtgta 180
 tcgttgagtt gaagacagaa ctgcaaagac gcgggtctga cctgtgcgtc ttgcccaggt 240
 tttgtacgga ctccatcctt gagatatgcc ataaatacgg aatagaagct atctactaca 300
 actatgccga gctcccagac caaatgcagc ttcagaatga tatgattact g 351

<210> 3724
 <211> 371
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-B5

<400> 3724

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 aaacgttgat attgcaaaag tttcttttcg gatattacag tctctacatt ttactcagcg 120
 agactctaca aggttgacct aaaaaaatat tatattctag tttcccagc ataggtatac 180
 tactcgtcaa tgactacgta ttcaaagtct tcttccaaat ttctgtaaat aactagcaag 240
 cgtttgctgc aaacgatcgg acaagttact ttgaataacg tttttcaacg ttggattatt 300
 tgccacaact tcggtaacgt tattgatgag caccttgata gaaagatgag ataatacaaa 360
 gcgctttttc a 371

<210> 3725
 <211> 472
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-C10

<400> 3725

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 actcatttcc aaagcaaggt caaaaatggg tgggtgcttat atgattttgg aatttgcagc 120
 ctttatatac tgggcgcctt ggattttactg tattccgtta tcgactgcgc agcatcaaaa 180
 gagaagattg ttgccacggt ggaattaaaa aatagaaaaa tgcgactcta gaaatttggc 240
 gcctctaattg aatcctaaat aaatgggatt gtttagcttt ggagaaaagc tgtttttcgt 300
 ttttttgtgc acgaagagag atgagtcgct ctatggagat atcaatcaaa gcatcggagt 360
 cggagagcac attacaaagt acacgaaatg aagaattcaa ccatggcaac aatttttacg 420
 aagaaattga aaaactaact tctctgggggt acaacgcac agatatacaa aa 472

<210> 3726
 <211> 474
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-C11

<400> 3726

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 taaacagtat gcatactatc agagtccagt ctgcacttcc gtaaccacac agagcccata 120
 ctggacccaa tgctcgaaga ctgtgcaaac ctttgtccca agccagtgca gtacttatac 180
 ccaatctcct acatggacct attgcagcac ctacaccacc actagcgtac catctcaatg 240
 cagcaaggcc gtgactacct atactcaaac ctgctgtgct tatgcccac aaacttccta 300
 tgcagtcagt accgagcaat atgttcagga aactgtatct gctcaatata cttcttacta 360
 cggcgaatca tcctccagct attattaccg agcagctgct cctcagagat ggtatgagga 420
 acaatgcacc tcatactgct gggttccagt acaggactat gaaacttaac aatg 474

<210> 3727
 <211> 395
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-C12

<400> 3727

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 tgacgagaga tgaacaatg attaggcgcc aatcctcttc atgtctgcat gcttggtggt 120
 ttcacacttg ttggctatca aagccgcgaa tagatagttt caaatacaaa acatcgcca 180
 agtggtttcc ttcttctcc gagcgctgcg ctttgaccg tttcaagact cgggtcagta 240
 gaaggaatgc gcaggtcgtg cgttggtatgt ttactaccga ccatactcag ccactgtact 300
 tggcacaatc ctttggtggt tttacgcctt ctgcctcctt aatacagttt actagtggtc 360
 tgggtggttt ggcagtactt gccttggtta tcata 395

<210> 3728
 <211> 279
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-005-Q1-E1-C4

<400> 3728

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 tttgctaaca cggttggtga gttgtagaaa gcatttgata aatttccgc gaggaatcct 120
 acttgggacg tgtcctcaa tgctgcagag agctattcgg tatgtctgtt tattgcttgt 180
 tttcataaga gagagagagt tggacatcga ataaagaaaa aaccacacaa agtggaaaca 240
 cgtaaaaaaa aaacaaccag aaaaaacaga aaccacaca 279

<210> 3729
 <211> 308
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D11

<400> 3729

tccgaaattc aagggtccac ccacgcgtcc gcaaacgcgt ccgcccacgc gtccgctgag 60
 ataacaaaagt ggcaggatcg actggcttgt gcgtttctcc atccacaaag catagtttgc 120
 cagttgtatt gttttgatgg tttctgttga ttattccctt ttttttcaca aactttgtcc 180
 agtacttgtc caatagtcac atatttggga taatacaacg ataaaggttg ttgtagtgat 240
 ctcgtagtgg ctaagttagc agcaacatgg tcctctatgg tgacatacaa ataaactcta 300
 tcttgcac 308

<210> 3730
 <211> 350
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D2

<400> 3730
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 caaacgacga caagagaagc tgggtcggat atccgagcgg aagggtgaact ttggcaacgg 180
 aaaggacatt tgggtgaagt ttggcgacga cgatttgctg ctatactacc acattctgtt 240
 tttggaaatg tattgtgtat tttcgagatg gaaaagaacc agactttgca gcctaccaag 300
 tcaaaaatgc ttgctttgaa aaatactcaa gtgaagagcg aaccgaatac 350

<210> 3731
 <211> 406
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D4

<400> 3731
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 aattgaagga ctggagtctt ggtctgtcga ggccaaggta ttgatgatga atattatgaa 120
 aagggtggatt gactcaaggg agaataaatg ggcgacactc gatgccttgc aaaactctcg 180
 agccagaatt tcagagttgg aagccgaagt gaaacaactt tgatcatcaa ttaagctgtt 240
 ggagttggaa aatgatcgtc gactaactga acaatccttg aaacatatga atcagagttt 300

tgtaaagtga gaaaatgtta gtgacgtttg tatgacgaca agtgattcat ccaacgttgt 360
tcaagacgac gacgaacatc cagatacgat catccctgca actcga 406

<210> 3732
<211> 346
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D5

<400> 3732

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agacggtgtg ggcagaacac ttgagcgatg agtgtaaacg ccgcttttac aaaaattggt 120
acaagagcaa gaagaaggct ttcacgaaat acgcaaaggt caagtatcaa aaagggtggag 180
aaagcatcaa aagagacttg gagaagatta agaaatactg taccgttatt cgtgttcttg 240
cgcatactca aatgagaaaa ttgaacattg gacaaaagaa agcccacatc gcagaaatac 300
aagtgaacgg tggaacgacc gcagaaaagg tcgactttgc tacggg 346

<210> 3733
<211> 415
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D6

<400> 3733

gggtcgaccc acgcatccgc ccacgcgtcc gccacgcgt ccgcccacgc gtccggggcaa 60
ctcaactagg ttcttttaag aatgagattg ttccagtgc actgagtgc ggcaccgttt 120
ttgatgccga tgaagaagta cagagattca aacaagtgga tcgttttagga gaattgaaga 180
cggtatTTaa gaaacaaaat ggaacagtaa ctgctggaaa ctcgagcaag ttgagcgatg 240
gagctgctgc attagtgttg gcaagtggcc aagcagttcg agaatatggt ttgaagccac 300
ttgcgaagat tataagttat gcagatggag aacaagctcc tattcgattt ccaacaactc 360
ctgcaaaggc agtcaagtta gcactagaaa gagccaaact tgccgtcaaa gatgt 415

<210> 3734
<211> 79
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-D7

<400> 3734

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catgttcaag tccctattc 79

<210> 3735

<211> 278

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-E3

<400> 3735

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gagccaattt ggtgcagatc actttgggtgc agtattgccg gtgtcagtag aagaaacata 120
acaagtccaa gctctttgga ctctattttg atttctatct agactggcaa tgtaaataga 180
actgagagtg tcaagttacc cctttttgtc ggtagagagt gacaatgggg gttgcgttac 240
caagacggca agtctacgca gtcgtcgaca caagaaaa 278

<210> 3736

<211> 370

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-E4

<400> 3736

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gccacgcgt ccgccacgc gtccggtata ttactttgga aagcgacctg aagattggaa 120
gtattgcaga cttgttgga tggtattcat agttgccggt gaatgtattc gaaagttggg 180
aaccctaactt ttgttggtca atcctatttc ttgtatcctc tttgctgttc ttagttggaa 240
gttttttcgc gatcgaatcc gatgggaaga agagacactc gttggccttt atggtgttca 300
gttttcaggaa aagtatcgaa acaaagtttg gagtgggaatt ccttttattt aaatacgacc 360
tgccgattgg 370

<210> 3737
 <211> 449
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-005-Q1-E1-E8

<400> 3737

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catatgaaag aagcagcacc gactgttttag caaaaacaca gcactctgca gaaaagagaa 180
aatgtaaagt atagagtgtg cggcctgcca aatagtagag aagaaatcga tgaaagttaa 240
agcgagtaaa agatgaggta tagagaatgg cggtcctaac agtaaggatc caaaggtagc 300
gaagtaaata gacgtttgaa aggcgtccag tatgaaagga gaaacgagt tagcactgtc 360
tagtcgtcca actcagcgaa acagcaataa ctgtgaaaat gcagtaaact agcagtagga 420
cgggaaagac ccataattct tgactagat 449
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<210> 3738
 <211> 452
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-E9

<400> 3738

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aataactgtg aaaatgcagt aaactagcag taggacggaa agaccccata attcttgact 120
agataggttt agggaggaga gagaatcatg aagtagagga ggtggggtaa gagatgaaag 180
accactgcat gaggataagg aatctaactg agtaaggaaa ataagcttaa gctagtgttg 240
ctggggaagt aaagcctaag aaagagtaaa ttaggcaagc aaaggcatga gagaagtata 300
atagcagaag catgcttgaa gaaaaagaaa gagatttcag aaagggaaga aaagtcagct 360
atagagaaca ggtgaaggag aactcaaaaa gaggagagca ccgaacgatc gaagaagaaa 420
ctttgggggt aacacgttaa agtgggggta aa 452
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<210> 3739
 <211> 480
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F12

<400> 3739

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 agacgaatgc attgccgcac tggatggcaa ggatatgcaa ggacgcacta ttcgtgtgaa 180
 caaggcaatg tctcgtgaac aacgcgagag tggaggagac tttcgtcgcg gtggtcgtgg 240
 acgatacgga ggttttcgtt ccggtcctta tgagagacgt gaacgtgact ctgatcgtag 300
 aagagatcat gacaggagag ataacggcca tagtagccga ggtcgcagtg gaggtttccg 360
 ccgtcgtgaa gactttgatt gagagtattt gtgaagtctt ttattgttgg ttgcctatac 420
 tagaaactag ctatacgcat ttgtttccag taaagttttg gataaattgc tcattcaaaa 480

<210> 3740
 <211> 360
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F2

<400> 3740

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 gaacgcgaac aacaagtgga gcgacttgtg aaaagaaacc atttgtctcg agaagaagcc 120
 ttgcaacgaa tcgattccca aatgccttta caagaaaaag tacgtttggc aaatttcgtg 180
 gtggacaact ccggaaactt ggcggtatta gagaaacaag tgaatgaact ttggcaacaa 240
 ttagagcaca ttcgtattcg aagattgcgt cgattcaagt tgtttggatg ggctgggtta 300
 ggtgcccttg tggttattat ttccatggga ctgttcagga aataggagaa aaagaaaata 360

<210> 3741
 <211> 423
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F3

<400> 3741

ccacgcgtcc ggaggtttct cgtagcttta ttgaatcgaa acaaaaagct cgtttacata 60
gtgaagctaa tagaaactgt cataaagtgg ctgtaactgg aagctggaga agagaagaga 120
ttccatcgaa ccacagtgtg ttcgatacag cttacgaaag tatagtcagt aatctacgag 180
atgaagctag cgccgaccaa agtgaagaat tcaagaggct tttaaagtcc atagagacat 240
ttgaagaagg agaagtagtt tctcagtcct tgccaaccga tgagaaacag tttatttgcc 300
ccctttcaca aaagctacta gttgaacctg tgaaaaataa ggagtgtcct catacgtatt 360
cgaaagaagc attagtgaca tatttgaaaa acgacaaaaa ctcaaaaaac aaactcgcaa 420
gct 423

<210> 3742

<211> 351

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F5

<400> 3742

gggccaccca cgcacccgca gacgcgtggg cggacgcgtg ggcggacgcg tgggcgacta 60
gactcgtgga ttggaaggag tagcagtga tttccaaag gtggcaactc ttctccagaa 120
gggggttcat ctctaaatt gggtagcagt ccttcgaaac taagcaaaag tctcgcgct 180
caagaagttt ggagtaaaac agtgcaccc tgggggcgtt cttactcagg aaaaaaacgt 240
tatgacaccg tggagaagga cacagagaag gaaccaagta tatttgagat acatgatctg 300
tccaagaaac agagcggcag ccagtaagaa gagagtttgt gagttttcaa t 351

<210> 3743

<211> 420

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-F6

<400> 3743

gggtcgaccc acgcatccgg cataaaattg ccgaaagtat ccagtgga gaaggtggtg 60
aggaggtcga gtcggtacgt gaggaagaaa ccaacgtgga aaataatgaa caagatacaa 120

cgaagcaaga agaagaagaa attgtttcca agtttggtcg ttccaaggca gtacctggtt 180
 cttcgaaagc atcgagtaag ggtagcaaga tgggcgaaaa gggaggtaaa aagagtagga 240
 aaactgctac aaagaaatga agtactcgat cttccatgca ctcttgccaa tgtcatttgt 300
 tgcattcatt ggaacacttc atttggcaag tcataaaacg cattttttca ctccaatttg 360
 gattgactcc tccccgtcct tccatggaac caaataaatt tgttgcgatt attgtcggtc 420

<210> 3744
 <211> 384
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-G10

<400> 3744

gccacccacg cgtccgcaca cgcgaccggg agcagtgatt gttgccatgg ttttgtttga 60
 catgatttcg aagctgatag aaaaagctcg agcaccaaca gagcaagaag tggagcagga 120
 agcaaaagac aggatctatc gacgctatga acaaagtga ctggtgcatg atatgtggag 180
 ttctcctgtg aaaccaccaa actggtggaa gtcggatgcc tttcaagaaa attataagca 240
 attgtgtcac agacataagc agcgcctcaa gaccctgca gagcgaacgc tagaagatat 300
 ggaagaaatg taaagaccta gtagcctttg gtaccgcaag ggagtagtaa caatggtgtt 360
 gcaaccagtt ggagtttcct tggt 384

<210> 3745
 <211> 430
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-G12

<400> 3745

tatgcacagg atagacaatt tcatttgga tgtattgtca tccattttta ggcttgagag 60
 tttttcgtct ttgttatgtt ttttggttt gtatatgttt cctgtatttt ccaccttggt 120
 tacttttcta ctctctcgtc cattatctgt gaacagctta tgggttcttat tattgatgat 180
 ccatttttgg agttggcagc atgcagataa tcgatggaaa agagtgtttt cgcggtatct 240
 tataccgctt cactttctag ttttcggatt ttcacatttg actgtgatag attaactaac 300

ctcaatggaa aggattctct tggctttctt gttgtgtatc gttcgcagcg gagatatact 360
gacaagagaa gttctccttg tgttgtgtat acaatatata ttcttagagt ggatacagag 420
tcagcctctg 430

<210> 3746
<211> 356
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-G5

<400> 3746

cgggtccac cacgcgtccg cattgattgc tcgacgaggc gcagaatggt cttgtcggtt 60
aaacttggtg actgttgata accctgtata agagcagttc aagttgtgca tcttttgata 120
agaccatagt gaatataacg gataatattc ttttgctcaa gaaaagcaac ttggaggagt 180
tgccgataag agtgtatgga ggacgcaagg caaaccttg tgtttaacaa cttgtatatg 240
gaatacgact agggagaaag gagggagtta tcttcccaca aaacactaga ggcttctggt 300
acgttacgga ggcaagaagg acgaaggcgt tccaaagtgt tggaacccca tttgtg 356

<210> 3747
<211> 466
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-G6

<400> 3747

gggtccaccc acgcgtccgc acacgcgtcc gccctcgtcc ctgcgtcgtc cctccaacga 60
gtaccaaacc ataaaataga aaatggcaac ttactatcc aaaaaaagaa gagcagtagc 120
cgacggtggt ttcaaagcag aacttaacga gtttctgatg cgagaattgt cggaagaggg 180
atactctggt gtagaagtga aaccacgcc gttgcgaacg gaaatcgtga tccgagctac 240
cagaacacaa aacgtgttgga gagaaaaagg tcgaaggatt agagaactca ctgcgttggt 300
acagaagcga ttccgttttc ctgaaggaa agtggaactt tatgcggaaa aggttgcgga 360
tagaggttta tgtgccattg cgcaagcaca aagtttgagg tacaagttgt tgggtggatt 420
ggctgtgcgt agagcttggt agggcgtcct acgatttggt atggaa 466

<210> 3748
 <211> 226
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-G7

<400> 3748

ccttgtagtg gccacaggac tggagattta tgttgctatt cagacattgc tagatacttt 60
 gaaatacaag tctagcaagt ttcctatcgg tagcatatgt tgatgaatag catcgtttgg 120
 tattcttggg tggttggtta atttcttctg ggtggactgt tgcaatatgt atatggaaat 180
 aaaaatattg tcaaaataaa tacttttgtc tttggagttg agatac 226

<210> 3749
 <211> 311
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-H4

<400> 3749

gcgtccgcac acgcgtccgc ccacgcgtcc gctggaatta tgttgctcga aacttttgtg 60
 aagctgattg cttggtatga taatgagtgg ggctactcca atcgtgttgt agatttgggtg 120
 caccatattg cgaaagttga tgggtgtagct taactctgct tttcttgttg ttttttcgtg 180
 tattgtttgt tttgtgaaag agatgaaatg tgttgctctt tccataaaaa gttgtgtgctg 240
 ctgtgaaaaa aaaaaaaaaa aaaaaaaaaa gacaaaaaaa aaaaaaaaaa aaaaacaaac 300
 aacagacagg g 311

<210> 3750
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-005-Q1-E1-H5

<400> 3750

ggggccaccc acgcgtccga aaggaagtaa aaggaggga tgaagggaag ttatggcaaa 60
 aacacgtgcc agcagcagcg gtaaaacgtg tgtagcaagc gtagagcaga agaactgggt 120

gtaaaggctcg agtagtagag taagtgtaaa agggaaagga aaggagagaa agaggaaagg 180
gatgaaatgc agagatctct agagaaaggc aagaaagaaa agaaaggaag acacagtaaa 240
tgaggcgaga aagcatagga agtgaaacgg attaggaacc cgtgtagtct atgcagtaaa 300
agaaagaatg agtaagaaaa aaggagtgca ttccaccagg ggagtaaagg cgcaagaaag 360
aaaccaaagc aattgacggg aatcggaaaa acgggtggat cacgtaaatt aatccgatat 420
aaaccgagaa ccttacctct 440

<210> 3751
<211> 360
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-005-Q1-E1-H6
<400> 3751

ccgggtccac ccacgcgtcc ggacaagcgt cgtgacagaa gcaccaccga ctgtttacca 60
caaacgcagc actctgcaca ttagacaaaa tgtaaagtgg acaatgtgcg gcctgccaaa 120
tcgtcaagac cagctccatc acagtgaaag ctagtaaaag atcaggtata tagaatggcg 180
gtcacaaactg tcaggatcca gaggtagcca cctacacaga cgtctgatag gcgtccagta 240
cgaaatgaga gactactgta gcatagtcta gtcatgtatc taatcgagac accagtacac 300
tgtgaaaacg caatgaactg gcactaggac ggaatgaccc cacacatctt gactataaaa 360

<210> 3752
<211> 362
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-006-Q1-E1-A10
<400> 3752

gtatgacatg atttcaagc tgaaagaaaa agctcgagca ccagcatagc atgaactgga 60
gcaggaaatca aaagacagga tctatcgacg ctatgaccaa agtgagctgg tgcaatatat 120
gtggagttct cctgtgaaac caccaacctg gtggaagtcg gatgcctttc atgaaaatta 180
taagcatttg tgtcacagac atagagcagc gcctcaagac ccaactgcata gcgaactctc 240
taagatatgg cagaaatgta aagactttac agccttttgg atcgacggg agtactaaca 300

atggtgttgc aaccagttgg agtttccttg atctatgagc acttattata aacaatttat 360
tg 362

<210> 3753
<211> 408
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-A2

<400> 3753

ccggtccgag attcacgggt cgcccgacgc gtccgccaac gcatccggga gacccaaatt 60
aaggtgagag aatggacgat aaggaactag gcaaaaggat atggtatctg cggtagaaca 120
tatgaaagaa gcagcaccga ctgttttagca aaaacacagc actctgcaga aaagagaaaa 180
tgtaaagtat agagtgtgcg gcctgcaaaa tagtagagaa gaaatcgatg aaagtgaaag 240
cgagtaaaag atgaggtata gagaatggcg gtcctaacgg taaggatcca aaggtagcga 300
agtaaataga cgtttgaaag gcgtccagta tgaaaggaga aacgagtgtg aactgtctta 360
gtcgtcaaac tcagcgaaac agcaataact gtgaaaatgc agtaaact 408

<210> 3754
<211> 403
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-006-Q1-E1-A4

<400> 3754

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attaaggtga gagaatggac gataaggaac taggcaaaag gatatggtat ctgcggtaga 120
acatatgaaa gaagcagcac cgactgttta gcaaaaacac agcactctgc agaaaagaga 180
aaatgtaaag tatagagtgt gcggcctgcc aaatagtaga gaagaaatcg atgaaagtga 240
aagcgagtaa aagatgaggt atagagaatg gcggtcctaa cagtaaggat ccaaaggtag 300
cgaagtaa atagcgtttga aaggcgtcca gtatgaaagg agaaacgagt gtagcactgt 360
ctagtcgctn aactcagcga aacagcaata actgtgaaaa tgc 403

<210> 3755
 <211> 438
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-006-Q1-E1-A5

 <400> 3755

 ttcgcggggc caccacgcg tccggagagg aacaatatct gcttggccag tctcaaagaa 60
 ccttcaataa gtatccaaat tataagaaac ttataacgag tagcaacata aactgtgtga 120
 ttctcctgtg ctttttcccta gtagtatttc gtaacactgc gggctttgtc tcacctgtct 180
 atagaaaaaa ctctggtaca agtgctgcct tgcttctcga ctctccatct tttcaaaatg 240
 gcacccgtat acctaagaaa tacggctgtg attattgtga acaagccgca agctctgtgc 300
 cgctgacttg gagggtaagc ctctagggac aatacgctta gtgacagttt cagttgcaag 360
 gagtgagttg cagagctgac aatacctttg tgttattagt gcacgatcca gatgctatta 420
 gtgttactgg attggatt 438

<210> 3756
 <211> 357
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-006-Q1-E1-A6

 <400> 3756

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 gcaacgactg gttggttgtt ggtgaaggag cacaagtgtt gcattgttgt tcaatactgt 120
 ttgtaatagt agcagtgaga gtatcatgac gagtagtaac agtggtagtg ctcatcaaca 180
 agccaaggat tgggtggagt ccattagcaa aaatgagtgg acaaagcctg cagctgctgt 240
 ggcaggaact ttggcctcct tgggactgat aagaatgtat tctaattggac ctgtatataa 300
 aaattccgtc aacttgaagg gcanagtagt tgtagtgaca ggtgccaata caggcat 357

<210> 3757
 <211> 425
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-A7

<400> 3757

ggggccaccc acgcgtccgg aaagaaaaga gaatatccaa tatagtatgt atgggaatgg 60
gagaacctct tcataatata gacaacgtcc taagggtat tgagatactt ttggatgaac 120
aaggccttca tctatcccat aacaaagtaa cagtttcaac ttcagggttg gtacctgaaa 180
tggagcgact tgcaaaagaa accaatgtca acatcgact gtcattgaat gcgacaaccg 240
atcaagttcg cgaccagttg atgccgatca accgcaaata tcccatccaa gttctcttaa 300
atacagcgag acgaatttac accaacgaac gaagcggta aaaacttttc gtcgaatatg 360
tcatgttgga cgggtggaat gatagtatcg aggatgccaa acgactgcat atgttattgg 420
ctggg 425

<210> 3758

<211> 496

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-006-Q1-E1-A8

<400> 3758

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ggaccttttc agttattgca agattccgcc agcagtgaat cagattgaaa tgcacccgta 120
ttatgcaaga acagatctgc tcgaattttg taagagtcgt ggagttcatg tgactgctta 180
ttctctctt gggagcggta aacatggtcc gcttcaagat gagacagttg caaagattgc 240
caagaaacat ggaaggacac ctgctcaggt attgatccga tgggtgtctac aacgtgggtg 300
ttccgttatt ccaaagagcg taaagaaaga acgtatcaag gaaaactttg atgttttatt 360
cgaattgagt ccacaggata tgaaggaatt gnngagcctt agatagaaca taatcctcaa 420
tcatcaaaag gaatattggg gttccaatat ccagccttga aagattcttt gccgtacaat 480
aaacaaattt cttgtt 496

<210> 3759

<211> 468

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-006-Q1-E1-B2

<400> 3759

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agcatgatga agagcgctat gaagttcttt gtatttagca ttattttggc aaatgttggt 120
cttactattc aagcagcaac ggttttggag actttggagt cactgaaata tacagagtat 180
cttgacatgg taaaggctgc aggcctggac tcgaagttca acgactctgc tgttacatgg 240
actgtttttg cagcaaacia tactggagtc aatgccacct tggcaccaaa gcacttggtt 300
atttctaata tcacatctaa tgcgacggag agcaaagaca ttgtggaata tacttttgta 360
caacatactc ttttgtcaga tgatattaag acaggaacia ctatccttac cgccgtanac 420
ggaatgaatt tgactgtggt taagaatacg acacgaatat ttgtaaat 468

<210> 3760

<211> 450

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-B3

<400> 3760

ttcacgggtc gcccgcacg tccgagacia aaattttatg gaaaagtctc aaaaactgga 60
gaagatcggt gaaggcactt atggagtgtg atacaaagca aaagacaaat atacaggaga 120
actcgttgca ctgaagaaga taaggctgga acacgaggaa gaaggagtac cttctacagc 180
aattcgcgaa atttccatat tgaaggaatt gcaacatcca aacattgtga ggtaagcatg 240
gagtgatgag agttctttga gtatatcgtg tggtcagact tcgagatgtg atccacctgg 300
actccaaact atatctggtg ttcgagtatc tggacaaga tttgaaacat tttatggata 360
gtttaccccc tggaaagcta gaccctcttc taatcaaata ttatttgtat cagcttctga 420
atggtttggc gtattgtcac gcaaaccgta 450

<210> 3761

<211> 354

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-006-Q1-E1-B4

<400> 3761

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ctcgtaccag cgtggtatcg agacaatgtg caaaatactt tgccgttggt atcccttttg 120
ttcgaggtat agtgagatag ttgttgggaa atgggtgcaac gagttgaaga ctggaacata 180
tatatatagc gtttgaaca agaacatgtg gtagatatta cggaagagga tttcgatagc 240
catatagatg atagcattca ggtangtgta tggatagagt tacttgggat atactttggt 300
tttaaagata gcgatagcac aagatacaag aactagaaaa atggaaacaa aaat 354

<210> 3762
<211> 253
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-B6

<400> 3762

gaaataaagc acgaaacagg ttttatttcg tcgcactgaa gaactcacia actcagtgtg 60
gagaatccaa tttgtttcca tcacacgaaa atttcagact ctccaaactc tgcattggga 120
tcgaagccac caaaggcagg ctgctcatta aaagaaggcc atgatggata ggatggatat 180
tgaggaaatt ccacatagga tgtgtaagaa ggagcgtaaa aatagctagg cgaaggatat 240
ccctttgagt aat 253

<210> 3763
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-B7

<400> 3763

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aaaattcttt gtgttggtaa atggaccctc gttattatcc tgtcaatact gttccagaac 120
caagtgtcc tactgaaagt tcctcggaac cttttagcaa cacttatcat ccattcata 180

accaacaaaa cctacagtat aacaggagac cacctccttt gaacactaat ttcttggata 240
 caaaatccag taatctgcat caaaacgtcg ctgtacatag ccctactcca ggcttcaacg 300
 actactacac aagtcaacac agcaacgagg agaatgagag aaccaaaagaa ttgggttcgat 360
 ggaaggacga gttgttctct ggtctatttg taggcttaac gtttctttgt acttgtatac 420
 ttgtgtggag tgcttggtgg acagctac 448

<210> 3764
 <211> 454
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-006-Q1-E1-B8

 <400> 3764

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 cgtttttcca gttttgctac ggtctggttg gtatcttttt caagtggcaa caaaagttgt 120
 ggtatattga agatgctttc aatctatttt tctgggcttg gtgggttggtt ggtgctatcg 180
 ttgctaccgc tgcaagacca tcgactggaa tgctcaactt gcacaacaac aggacagaag 240
 tgaatgccgt ggaggctttg ttgtggggaa atatgtgtct ctatttcttc aatatattct 300
 ttggtgttctt tatctattgg gttggtgaaa ctgggttggtt ggatcctact gttgcagact 360
 atcgcgtatt gacttcattn ggaaaaggac aactgggaaa ggaagctcag ttgcatcagg 420
 atantcccta agaagaagca atgttggttg gttg 454

<210> 3765
 <211> 469
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-006-Q1-E1-B9

 <400> 3765

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 cagagaaaaa gttacaactt gccaatgttg tgggaaacaa acctcccaa gtcagagaaa 120
 ccagtacagt agcagttgat gatttgaagc cttggaagag agaagacgac gatgatccaa 180

ctttatcaga aataggtcaa aagaatttgc agcagcagca acagaatgct gtaaataata 240
tgaataatag aaaggataac aagaacaaga cagtagatat gaccaaagag ttttttaggg 300
agcctccaag acgtggaaga ggaggaaata gtcgcggtat tggaggggaat aggagaggag 360
gaagaggaaa aaccggctct ccaaatactt ccaataataa ctatcgacgt gaagaaggaa 420
tagtggaaga agcaagaaat gatcatagac gagctgcttc tcgatcgag 469

<210> 3766
<211> 483
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-006-Q1-E1-C11
<400> 3766

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agaattggat ataataacat gatatactcc gaagatgaag tagaacgtat tggccgtggt 120
gcttttcaag tggcacgtca gcgtaaaggt cgactatggt ctgtggacaa gtctaattgtg 180
ttagatgtca gcccaattatg gcgagaagta atcgtttctt tgtcaaaaga atatcctgat 240
gtggaactga ctcatatgta cgtggataat gcggcaatgc aattgattcg caatcctcgt 300
cagtttgata ctattgttac tggaaatctg tttggagata tattatctga tgaagcttct 360
atgttggttg gttctttagg aatgttacca tctgcttctt taggagaagg caatcgtcca 420
ggagtatttg aacctgttca tggttcagct cctgatattg ctggtcagga caaagccaat 480
cca 483

<210> 3767
<211> 321
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-006-Q1-E1-C2
<400> 3767

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tgtgtcctat aggttcggtg gggctagtta tgataatagc tttgtactt tttgtgtttc 120
taaggagctt ttttgggttc tgagaaacgt tgctgttgct tgaattcgcc tctggtctta 180

agaattaact gtatcgctcag actacttatt gacactggca gtaatttgac tagtcctgcg 240
 ttgggtatga tctcgttatc tttagcaagt cctttatcta cagtgttgaa tattttgcaa 300
 aataaaactt ccgttttcttc g 321

<210> 3768
 <211> 442
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-C3
 <400> 3768

ccggtccgta gttcacgggt cgcccgacgc gtccgccagt cgtggtggtg gtggtcattt 60
 ttcccatcca aaaaaagatg atggacagca agttattggc catcgtaaa ctttgtgcta 120
 ccaacgatat cgaagccaac tttagaaatt gtgcaagtct tattcatcaa gctgttggtc 180
 aagggtgctcg tttcgtgagt cttcccgagt gtttcgagta tataggcgcc acacccaaag 240
 atgcgctttc catagctcaa cctttggacg gccctttatt ttctcgctat agagaattgg 300
 ctgtgaaaga acaagtttgg ctgtcattag caggttttcca cgaacgaggg ccggatgacg 360
 ctcacatcta taattcgag gtcgtagtgg atcctagagg gtccatagtt gctgtttatc 420
 gcaagttgca cttgtttgat gt 442

<210> 3769
 <211> 464
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-006-Q1-E1-C6
 <400> 3769

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 ctggaccagc aaaaagttga tacagattca actagtcttg ccgaagtaca actatttcca 120
 gccatagaag aaaccaaatt tccaaaggct attcgaccaa aaggaaatga gacttcacca 180
 caaagcgaag catatgctgt acaactatct cgaagtatga gaaaagcttt actaacttca 240
 ccattatatg cgaatgatat ttccaggaaa gtgtctaagc gacagatata tacttacagt 300
 gacttgatac tcaacaatac tgaaaacgca aaacctcgcc tgtttgagga atcaacttgg 360

ttgaaaacca aagtacttca aacttccttc ntccatgtca acggaataat aatacaacta 420
gagaaaggtc aaagaaaaga aaaactttgt cttcaaccaa tata 464

<210> 3770
<211> 338
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-006-Q1-E1-C8
<400> 3770

ggggccaccc acgcgtccgg accgcccttt tttttttttt ttctactct cttctacttc 60
tcttgcttat tcttagcaca cttccagaac ttgacgggca gtgtgtacaa aatccgttca 120
cgctttcacc gaagcttttt cttcctcgat tacttgggat tctccttcc ttcacgctcc 180
ttcctcgtgc ttctcttggt tggacctttt ctcagttcca atgtggcttt cctcctctca 240
gattcccgtt ttacttcct ttatggtttt tactctaacc atttcttaca ttcttctgtg 300
ctttcatggt cttccactct ttcacacctc tttacgac 338

<210> 3771
<211> 463
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-006-Q1-E1-C9
<400> 3771

cctgccggtc caggtccgaa attcccgggt ccacccacgc gtccgcaggc tttagaagag 60
tctcgctttg ccgatgctgc gaatgaaaag caacgtttgg aagaaaaaca aagagctgct 120
agaaagatga gagaagagcg aggggaagaa tattctccat tatggtttga ctggaaatat 180
gaccaagtca ccgaaaagta cgattggaag ttaatggcaa atattatatt catcgcaaag 240
aaaagaaatg ggacatatgt ccggatttgt tctgaagagc tgccgattag aattgagcaa 300
ttctgtcgag caagtccttc gaaagatagc aactcgtgtc gtatgcggtt ttcatttccg 360
ttgcttttgt ggtttgtctg tataaagcgt ttgcattgtt cccatcaaaa aaaaaaaaaa 420
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaggg cgg 463

<210> 3772
 <211> 484
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-D10

<400> 3772

gcctgccggt acaggtccga aattcccggg tccaccacg cgtccgtgat tgttggtgtt 60
 ggtgaggtgg gaagcaagaa gagatgagta gaggaagtag tgccggttat gatcgacata 120
 ttactatddd ctctccagag ggacgactat atcaagtaga atatgccttt aaggctgtaa 180
 agtcagtagg aattaccacc gttgctgtaa aggggctgga tgcagtttgt ggagtaactc 240
 aaaagaaggt aaccagcgac actctagttg tgttggtgat cgtctatatg cagatatatt 300
 gacacatata tgtattgtct ttgtatatat aggttccaga taagctcatt gaccctaaat 360
 cagtcactaa tgttttccga atacggatc accacggctg tattttcact ggacttgcaa 420
 gtgggtgtta ctctgtttgt ggtggcgaaa cctaattttc tttctatagc ggacgcaagg 480
 gcac 484

<210> 3773
 <211> 434
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-D11

<400> 3773

gggtccaccc acggtccgc atgggtagtc ccagttggag atatagagat aggttttghta 60
 tttctagcgg ctgttactgg attcctattg tttttggtgg tcttcattga ccaaaatgtt 120
 tgtacttata ttgtagaaag accagaaaac aaactgcgca aggttacttc atatagttgg 180
 aatatggtag tggtaggcat tttgaatata attgcatcta ttctaggaat tccctggatg 240
 tatgcaggcc ttcctcattc tttacttcat gtttatgcat tggcagatgt ggaagaacaa 300
 caagtcatgg gaagagtaag ctatcgtatt gtccattcca gagaagtctg aattggtggc 360
 ttggtttctt acttgttttc ttttctgac attctagcaa agcctgcgct tgattaactt 420
 ccgattgatg tggt 434

<210> 3774
 <211> 411
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-006-Q1-E1-D2

<400> 3774

ttcacgggtg cccccacgcg tccggaaata ccaaggaagg ggagagttgg aaaaggagac 60
 ttggcaccaa tgactgaaat tacttccaaa gtggaaagaa aaacaacaac agcagcactt 120
 ggagaacttc cacaaaatat tttgtttggt ggattggcag gagtattggg tacaagtatt 180
 atttttcttc tttatacgat aaagaccaac ttgcaaagta gccattcaca ctacagctat 240
 tccaccacat cgagaacaag tttggctttt atttccaac agtggaaaat aggcagtgtg 300
 attcgttcca ttatangaag agaaggttgg aaaggaatgt atcgaggtct tactcccacg 360
 ttgctangag ttgcaccga naaaggcatc anactatctg tcaatgatat g 411

<210> 3775
 <211> 353
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-D5

<400> 3775

tccgggtgcc cccacgcgtc cgaccgaact tacatcggat cacgcaccga ccgttacaga 60
 tgaggaaatt gaagccatcg tacaagaaga attgagtttg tttcgcaagc agacggagaa 120
 acataaacia attacgacat gactttataa aataaatctt ggaatcgttg gaagaaaaaa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggggggccgc ccaaaggat caaagcttac 300
 ttacgcgtga atgcaacgtc aaacccttc aaaagtgtca ccaaattca att 353

<210> 3776
 <211> 432
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-D7

<400> 3776

ccacgcgtcc gccaacgcgt ccgcggacgc gtgggcaagc tcaatttcaa aaaagtgcac 60
ttgttggttg agcgcgcgcg cgcgaaatga gcattcatga agagcagacg gttgccttga 120
gcaagctaga gtgttaccga aagttagttg ctgagttgta tacagaagct gcccaactat 180
tctcgtctaa gaagtttgcc gaagctgctg acaaggttga ggcagctttg aaagagctcg 240
atggttatca agaagaggaa aagcaaactt ggggttttgc cgagctgcag cttctttatg 300
ggaggtctct tctagaaatg ataaagtgtt ctgcttcaaa taatgatgac atatttggtc 360
caaaagtacc taaagtcgtt gaactccaag gctctgactc tgaagaagca gaagaagaag 420
acgatgtttc cg 432

<210> 3777

<211> 480

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-D9

<400> 3777

cctgccggtc caggtccgaa attcccgggt ccaccacgc gtccgcacac gcgtccgccc 60
acgcgtccgc ggacgcgtgg ggtcgtccaa caacgacaac aacaacaaca tgctcgtgga 120
tcatcttcgg tttggtgttt acggttttcg tgcttttagaa gaaaaatgga tggataaacg 180
tcaaatagat gcgttgagac ttttattaca acgcaaattg agagatgcaa ctggaaaacg 240
tgcagagttg tggactcacg tagaaccga cgtaccggtg accaaaagaa cagaaaaacg 300
tatgggaggt ggaaaaagtc ccatcaaagg ttggaaagga agagtaaac aaggacaaat 360
attattcgaa tgggcagctc ctgtcgagat tccggtagaa gaaattcagt ccaagtgtag 420
tgttaggttg agaagtgtcg tggatcctgt ctatcatctc gcttctatgc aacgaaactg 480

<210> 3778

<211> 489

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-E3

<400> 3778

cggtccgtaa ttcacgggtg gcccgcacgc gtccgcaaac gcatgggtaa acttagaaat 60
 ccaaatacat gtgaactaac agataaaata ggtaaagttg gtattgtaag aggcttaaga 120
 ttaacagaat ctaatattat agttttgata gttgagtttg attcacaagt aagaatatgg 180
 ttttttgagg atgaattaaa aattattaaa taaataatta tttaaattat aaaatatata 240
 taagattata tggggatcaa tatagaaaaa ataatttctt tattacaaga actaaattta 300
 gattttttatc atattaaaac aaacaattat gaaattcgtt caaaaaaaaa tgaatctttg 360
 ctttatcaca attttaatat taattttaac atttattatt caacatttcc ttatttacia 420
 actaaaactc agaatgagtt atatcaaat atagatggcc aaaataataa tgataaaatt 480
 tttacaacc 489

<210> 3779
 <211> 222
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-E6
 <400> 3779

ttcgcgggtc caccacgcg tccgcgatgca gaaatgaatc aaggatatgaa acagtacatg 60
 ggagaaccaa agagtgaggc ttggcgacaa gtagaaagct atgtaaagga acataattct 120
 tacaagcttt ccgatgggtc tgtcgttatt cgattgaaca atatcgcgat tggcattgaa 180
 gccgagccta ttgaataata aaagcattgt ttgttttggt cg 222

<210> 3780
 <211> 461
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-E7
 <400> 3780

ttcgcgggtc gcccacgcg tccgccaacg cgtccggcag gatattgttac aaaatgttcc 60
 ggtgaaggta ttactttgc agcgaaatcg ggacgtatgt gtgcagaagc tattgcggag 120
 atttctttac aaggagaaag aattccttcc gaatccgaac tgaaggcgac ttatctgaag 180
 agatgggata gcaagtattg gtcgacttac aaagtattgg atgtattaca agcagtattt 240

tatcgcaata atattgctcg ggaagcattt gtggaacttt gtgaagatga atatgtgcaa 300
aagatgactt ttgattccta tctctacaag acagttgcc aaggaaatcc tttgcaagac 360
gtaagactat tgtttcatac attgggagct tttgccagag caccgcgttt ggcaccttga 420
aaataaaaaa gtgtgtcctg tgtgatgaat tggagtttat t 461

<210> 3781
<211> 454
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-006-Q1-E1-E8
<400> 3781

ttccgggtcc acccacgcgt ccgcacacgc gtccgcgaag aagagtttgt gaagcatcgg 60
gatgccatga tcgatcatat gcgtttttca agttttctga tgggtaaaag tttaggtata 120
tctgtattct caccttattt ggatcctgct atgattgcat ttgccaagag tttgacaaag 180
aaagaaaata ttggggaaaa gtatatccat ggaaaagccc aaatatttgg aaagctcttg 240
ttacgcgaag cttttcctca cgtcacttca tgttggagaa acaaggagcc tattgaagtg 300
ggaagtggta cggctgcctt gggaaatgga tattttgaac aacttgtaga tgattcgtcc 360
tttgctcgac aggtggatga aatatggaag cacgaaggcg tgtatattcg taccaaggaa 420
catttgtggg attatcgaat atttcaacag caac 454

<210> 3782
<211> 363
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-006-Q1-E1-F2
<400> 3782

cgggtccgaga ttcacgggtg cccgcacgcg tccgcaaacg cgtccgcca cgcgtccgcc 60
cacgcgtccg ttatcgtttg tcaaagtttg gttgttttct tggtagcagt tgtacattca 120
acatcatcaa atgccaagag gaggaagaa agattcttca aagaaagaag ccacaagtaa 180
acctgcagca gcagatgcta caaagacgac agaaaagtct ggtccggaag ccaagttgaa 240
gggaactggg gcaaagaaac aataaaaagt tgactatgca tgttcctggt atgttttgtg 300

agttctgttt gatagtttcc agctattctt ttggtagtga ataaagagaa aattttttat 360
att 363

<210> 3783
<211> 420
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-F3

<400> 3783

gtaccggtcc gtagttcacc gggtgcccgc acgcgtccgg tatggggatt agttgtagtg 60
gtgttgctct tgcgtgatac taggatggga ggtttcggct actttttaaa gtcaactttg 120
ttttctggca gacacccgga gattattccg ttggtttccg ctattgctct gtgtggagtt 180
tgtgcggttt ttgtgagcat cgacaacttg tttataatc caaccgtggg agctctcaag 240
tcagagcggg aagcgtattc gcgcaatgag aggcaacgtg actatgaaga cagacccttt 300
ttgaagttgg tgaaaccact tcgtgaccgt cctatcagtt ttatttcccc aaatgatgaa 360
aatagcagga ttcctcatta gttggatagt acaataaata gttgttgagc tttatgttgg 420

<210> 3784
<211> 431
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-F4

<400> 3784

cgcttgctgt gacggtccga gattcacggg tcgccgcacg cgtccgtact cttgaaggat 60
gtaccgtcag tgcttgaaga gagttttcaa gagtcgtttc ttggcttcag aagcggggaa 120
atattggaaa ggaagcacia ggtctttttc tagttcagct gggaccacaga ggaatgattg 180
gaggtcttct gtaaagaagt tatctgttgc tgccagcgta ggtgctgctg tggctgcctt 240
ttatggaatt gaaagacaga ggagagcccc tatttcttgc aaggaggcag aaactagtgc 300
aaagggttcc gtgaattatg acaaggtcag agaagcaatt gtaaagatca ttgaagagga 360
tgataatatt gctcccacca tgttgcgctt ggcttggcac tcttcgggaa cttatgacaa 420
gaaaaccaac a 431

<210> 3785
 <211> 455
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-F6

<400> 3785

ggtccaccca cgcgtccgcg ataaggaact aggcaaaagg atatggtatc tgcggtagaa 60
 catatgaaag aagcagcacc gactgttttag caaaaacaca gcaactctgca gaaaagagaa 120
 aatgtaaagt atagagtgtg cggcctgccca aatagtagag aagaaatcga tgaaagtgaa 180
 agcgagtaaa agatgaggta tagagaatgg cggctcctaac agtaaggatc caaaggtagc 240
 gaagtaaata gacgtttgaa aggcgtccag tatgaaagga gaaacgagtg tagcactgtc 300
 tagtcgtcca actcagcgaa acagcaataa ctgtgaaaat gcagtaaact agcagtagga 360
 cggaagacc ccataattct tgactagata ggtttaagga ggagagagaa tcatgaagta 420
 gaggaggtgg ggtaagagat gaaagaccac tgcac 455

<210> 3786
 <211> 344
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-F7

<400> 3786

taccggaccg agattcgcgg gtccaccac gcgtccgcag aaaacagtgt ttttagttt 60
 tgtgacatta agtgccaaac ggaatactat gcctgtacac tttattagta catgcgaata 120
 gaatggcagt ttggcaacac tatgaaacaa gcatagccaa tgaaaggcca ggtttaggtc 180
 aggttgttgg ataaccacaa cgcaactttt tccacagctg gagaacttgc actcatagca 240
 aatatacaat ttttatcttt agtatgtggc aagtgcgcct agcgcatttg gcgtggttgg 300
 tttgcaggat aaacttgtgc cgcctcacag gaaagtcttt tttg 344

<210> 3787
 <211> 479
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-006-Q1-E1-F8

<400> 3787

ttccggggcc acccacgcgt ccggagattc ttggcgactc ctggatattt gtcgttgagc 60
agttgtttca ttgctacggc gttgaaaata agattctatc gagaagattg tatgtccaag 120
tctagatttc atattacagt tggacattcc actgcagttg caaccgtaac tttcttctct 180
caaatgcaaa acggaagcgg agatttctcc tttaagcaac gatattttta tgagagacaa 240
ctggagaatg aagagtcgga ttctgaccc cctagagtgt ttttcgcttt gatcaagaca 300
gacgttcctt tatgtattta tccaaatgtt ggtttcatag cgtctcgctt ggattgggat 360
acggaagtaa acagatgtag aattgcattt cacggacaag tagtggcgaa gatgcaaaat 420
gtggctgcag ctganaagat ggagacaaaa gatgacatgt tgcattctac ncaagataa 479

<210> 3788
<211> 412
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-G1

<400> 3788

gtgacgggcc gtagataccg ggctgcagca cgcgtccgcc aacgcgtccg attcgcgatg 60
gaacaaaaac ctattttata ctcatctgg agaagttctt gctcttgag agtccgaatt 120
gcgttggcag tgaaaaatat cgactatgaa tacaaggcta tcaacttgg aaagaacgga 180
ggtgagcagt ggggatcgga gtatgagaga ctcaacccaa gtcacactgt gccgacgttg 240
gtcgtggacg gtcatactat tgggcagtc gttgccatta tggagtactt ggaagagacc 300
cgccacaag tgcccttggt accaaaggac ccggctcagc gagcaaaagt tcgtcaggta 360
gtagaaacag taaatgcgga tacacaacca ctgcaaaatt tgaggggttct gc 412

<210> 3789
<211> 383
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-006-Q1-E1-G11

<400> 3789

cccggggtca cccacgcac cgcacacttg ttcttagggc aacttgtcgg ggttttgttt 60
 tggcgccatg gtggtatgca aatactttct tcgaggtaac tgcaaatttg gtcgcaattg 120
 taagaacgaa caccctatgc agaatgctgc ttccaacagt tttggtgctt ttcaaaaaga 180
 gtgggaggat ccttttcatt cgggagcggg acagtcttct tcagttttca ataattttgg 240
 aaaccgcagt gggaaaccaa cgagtcaaga tccttttcgt tcgttcaact cttctgggaa 300
 tggcttttat cgtaaccagc gaaacaaagt tgctagggat atcacttcgt ccaacgacga 360
 tgcacgatgt cgtggtagag ttg 383

<210> 3790
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-006-Q1-E1-G3
 <400> 3790

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 aatgaatttt caggtgttgg aggtgcgtat tccaagagt tgggaacaga acagcacttg 120
 gagacataaa cgttgtaata gaagcaacac atataggaat cgctctttta ttcataatat 180
 gtcagggtctt gtttgtcaca gagcacttat attaatagat cacggcagta aagttccaga 240
 ggcaaacgac caaattgcc aagttgcttc tctagttgca aagcggcttc caaatacttt 300
 tgttactttt gctcatatgg aattagcgaa acctgatttg atggaggctt tcaactctatg 360
 cgttgaaaat aatgctagga acatcactgt ttgtccgttt ttcttgtttc ctggaaaaca 420
 ttgcactgta natataccgc 440

<210> 3791
 <211> 427
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-G4
 <400> 3791

ggtccgtaga ttcacggggc cagcacgcg tccgcagcaa ggaacttcga caaactgttc 60

gagtgcagat tggagccatt gctactcccg atgtcattca ttgggcacct gctttaccga 120
aaacgagaag tggcaagatt atgcgaagaa ttttacgtaa aattgcagag aaaggaacgc 180
atgtctcttc ggatgaactt ggagatattt ctactttggc agagccacaa gtggttgctc 240
aacttattga attgtatgga aaatgaatgt gggttttttt gggttggttta tttgtgtgtt 300
tggttggtgtg tgtgtgtgtg tgtgtggata attgattttt ctcttctttg cctatctata 360
ttatagaata tgaggtatga tatatgaata gatagagaga aaaaatgaag aaaagatgtt 420
tcatttg 427

<210> 3792
<211> 403
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-006-Q1-E1-G5
<400> 3792

ttccgggtcc acccacgcgt ccggaatgga gtacaacaaa gagagacgat gacttggatt 60
gtggatcaca cagcgtatgc tttcttcatg aaagctcacg attcgatgag aaaaagtagt 120
gatgatattt gcacactact acttgggtgtt catcggggaa ggtccgggtt tgcccacaac 180
aacacttgct gtgttttgct cgtgagagca ccactagtgg acatatccat ggtggtccta 240
cttaccagaa atgacactcg ctctgcacac cttgttggtg gacacctatgc ccctcactct 300
tatgtctctt gtgttggtgaa aagacataaa ggctcctgtg gcttttatgg atgcgagcca 360
agggacacga gtctcgggtt ctcaagtcca tggtaagtt gtg 403

<210> 3793
<211> 455
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-006-Q1-E1-G8
<400> 3793

ggtccacca cgcaaccgaa aacacagcac tctgcagaaa agagaaaatg taaagtatag 60
agtgtgcggc ctgcaaata gtagagaaga aatcgatgaa agtgaaagcg agtaaaagat 120
gaggtataga gaatggcggt cctaacggta aggatccaaa ggtagcgaag taaatagacg 180

tttgaaaggc gtccagtatg aaaggagaaa cgagtgtagc actgtctagt cgtccaactc 240
 agcgaaacag caataactgt gaaaatgcag taaactagca gtaggacgga aagaccccat 300
 aattcttgac tagataggtt tagggaggag agagaatcat gaagtagagg aagtggggta 360
 agagatgaaa gaccactgca tgaggataag gaatctaact gagtaaggaa aataagctta 420
 agctagtttg gctggggaaa gtaagcctaa gaaag 455

<210> 3794
 <211> 457
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-006-Q1-E1-G9
 <400> 3794

gcctgcagta cagggtccgaa attccccggg ccaccacgc gtccgaccaa agcaagttac 60
 ctagtacctg atacacatac cgttttatcg attctggaag cattggagac agacgatcat 120
 ggcacagaaa gttagtaacc tgcacttttc aggtaatcga ctattcttcc tacagccggt 180
 gcacactcgg cagcagatac aggtttggta aatatcgcta tgatgagaca catattgggt 240
 tgcatagcta caaagccatc gtcaccctat attgcaatga tcattatgca tacactctcc 300
 tacatccata tatatacaca tacacacaca cagagaaagt gtgcgtatgt gtgtatgggt 360
 cagagagaat gtgaaagaaa cattgttaga tataataatg aaaccaacga caaaaacttg 420
 ccagtttcnc ataaatagta tcttctgtcg aacgcac 457

<210> 3795
 <211> 438
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-H2
 <400> 3795

gcgggtccgag attcacgggg ccaccgacgc gtccgcaaac tctgcgaagc gtggtgggag 60
 agaccgaaca aatgataaaa gtgcgactac gagaagagtg acggaaacta gtagaggaag 120
 aggaagtgga agagcaagag ctccattccg tggaaacaac ggacggaatg agcgccctcc 180
 aagagaaagg aatattggaa gaaacgacaa gaaacctttc tctagaaatg atcaaaggcc 240

gaagaggact cccaaagaag catcggaaaa gaagcaacgt ggacctgctc ctaatttgac 300
 ggatgattgc aaacataagt tgacctttta ttgccagca aacggccgct atcttcgtgc 360
 ttgggtagat cctggaagtg agtctcaaac acccaaaaga aacgacgctg gacatgtcaa 420
 agttgctttt cgttcttc 438

<210> 3796
 <211> 273
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-006-Q1-E1-H6
 <400> 3796

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 gcggatgtaa cgaccagtca agaattatta tccattgcca gtcaagttgg tccacatata 120
 tgtgttttaa agacacatgt ggatattatc gaagattgga acgaacgtgt gtgtgagcaa 180
 ctggttcatt tggccaagtc gcatcagttt ttgatatttg aagatcgcaa gtttgcagat 240
 attggcaata cggttgagtt acaattcact ggc 273

<210> 3797
 <211> 371
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-007-Q1-E1-A4
 <400> 3797

accacgccg tccgaaaagg aatggcggag aaaaatcaaa caagtttcct caaacgaaca 60
 gaaaaacggt caaaaaacac aaaaaagggt ttgaaaaaa aattttgcaa atttttcccc 120
 cttcaagggt ttcaattcct cccatgagga agatgatgat gatggaggag ctttgaaact 180
 gtcctttctg gatttcattc cttgcttata actttgccaa aacttccaca acgtccgctt 240
 ctttctttgc aactccagat tgctttcatg ttcctccaga ttgcgaaaa atgtatttag 300
 ttctatattc aaagtagatt cctacatgtc ctttcagtaa atcaaacgac gacgtccatt 360
 gtatacgaaa a 371

<210> 3798
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-007-Q1-E1-B3

<400> 3798

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 ggtttgggaa aatttgaaag gcaattccta aagctgcctt ggggaaacaa tccgttaaag 180
 ttggaaccaa caaccattcc tttaatgatt tggactaaaa ggtccaaaag ttcaaataat 240
 gactctgttc accgggccta tccaagtaca gtggtagcaa agaaatggaa acttgtcgtg 300
 gatggacacg aaatggcagt gtttgccttc cgtgacccta gtgagatccc ttggtcctct 360
 actggagcag aatatattgt ggaatcaaca ggagtattta ctgctgc 407

<210> 3799
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-B4

<400> 3799

caccacgcg tccgaaaaga ttgccatagg aaattggacc aaaacctttt caaaaaattt 60
 aagggtgaagc ctctccttc tctcctcct cctaaccct tcaataccaa caacaattac 120
 tggaaaacct atttgtattt aggtttctgc gctattaaaa gaaggagatc gcgtattgaa 180
 tgctattcga aagcatacag ttcctagtgg tatgtttaca gaggagattg atcgatatac 240
 tggtttcgag caaggagcta tcaatttaac ttggagttat gatgcctttg ttactgcggt 300
 ttggtcgaga gaagatgttc acaagttgtt ttctaaatat tgtgaacctc cttctccatc 360
 tctacctagt atgccaggac ctgggtggtt atcttctcca tagtaag 407

<210> 3800
 <211> 484
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
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<400> 3800

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ttcatatgtc tttcagctct gttagggttca actttggctg cttctgggtgc aacgtctatt 120
tactcggtgc ttcagagtaa aagagactat acttttacag tgcaaagcat agagctggct 180
aatctaacag atgtatacaa cagcagtgtg ctggacttta ccttccttgc ttccaatgac 240
actgcttgga aacaatccag agccaatgtc actggtgcac ttagtgcagc aaaacaaaac 300
gtaacaggag caatagcgtt tctagaacgc ttgatagcag caagcacagt gaataaaaacg 360
gtggagttta gtacgctctc tagtggtacg aaagaggttg tttctctggc atgtttgccg 420
cttaatttca cgaaaaattc tactggagac tttgtggaag gtgattcggg ctctgctgct 480
gacg 484

<210> 3801
<211> 195
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-D10

<400> 3801

ctgcgtctna cgggccggat attccgggac gagccacgcg tccgcccaca cgtccgggag 60
agttggcatt tgaaaatatt gcacaagcgt ttgaagattt acatagtgga aaagctattc 120
gaacagtgtt gaaatattct caggaaaaga aataaaaaag aaagagagag agtgtgtgtg 180
tgtgtgtctt aaaaa 195

<210> 3802
<211> 322
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-E7

<400> 3802

aggacgcgtg gggttggttg ttttcttggg agcagttgta cattcaacat catcaaatgc 60

caaagggagg aaagaaagat tcttcaaaga aagaagccac aagtaaacct gcagcagcag 120
atgctacaaa gacgacagaa aagtctgggtc cggaagccaa gttgaaggga actggtgcaa 180
agaaacaata aaaagttgac tatgcatgtg cagtctgtt atgttttgtg agttctgttt 240
gatagtttcc agctattctt ttggtagtga ataaagagaa aattttttat atttaaaaaa 300
gacaaaaaaa taaaagaaaa ag 322

<210> 3803
<211> 440
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-F3
<400> 3803

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caaacacat taccaaaaag gatgcttgga ttgtgttgga cggaaaaata tatgacgtga 120
ctcgttttct ggacgaacat ccgggtggag aagaagttct acttgaagtt gccgggcgtg 180
atgctacgag agagtttgaa gacgttggtc actcggatga ggcaagagaa ctacgaaaca 240
agtatttcgt gggagtagtt cgtagtgaaa cgaaagaaga attggaacga gcagaacgag 300
aaggaatcaa gccagtgcag tctgcgaacc aaccggaagt acccttgtgg aagaaactgc 360
ttattncgg tatectctg gttatggcct ttttgattcg aaagtatatt tcctaagaga 420
ctattttgtg acattttttt 440

<210> 3804
<211> 342
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-007-Q1-E1-F5
<400> 3804

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cttctttcta cttccttctc tcgtaaacct ttcctctttc ttacctttta cttccttct 120
cttgtttcgc tactccaccc agcattctct cttctcttct tgctcctcta cctcttacct 180

tgattcggtc ctctttctat cctgtttctc ttccacagac aacaaagtcg agactgttgt 240
gcattctact gtgttgccctc ctttgctacc aatgcttatt tgcggtagaa tcttcgagca 300
atgctgtcttg tancagctca atgataatac tgtgctatta ga 342

<210> 3805
<211> 412
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-G1

<400> 3805

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gagttgcctc tttctctctt tccttatcgc tgccgcagtt gcagccgacg tagtttcaga 120
ggagagatgg ggatatgctc agcaaaccga acaacagcaa cagtgcgaac aagtatgtaa 180
acagtatgca tactatcaga gtccagtctg cacttccgta accacacaga gccatactg 240
gacccaatgc tcgaagactg tgcaaaccct tgtcccaagc cagtgcagta cttataccca 300
atctcctaca tggacctatt gcagcaccta caccaccact agcgtaccat ctcaatgcag 360
caaggccgtg actacctata ctcaaaccctg ctgtgcttat gcccaacaaa ct 412

<210> 3806
<211> 416
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-G2

<400> 3806

cacccacgcg tccggttgaa ttattctggt tcgtttactt gtctttttgt tgagttatca 60
tggcacgaac aaaacaaaca gcacgcaagt ctaccggtgg taaggcacct cgaaagcagt 120
tggcaaccaa ggcagcaaga aaatccgcac ccgtaactgg aggagtgaag aagccccatc 180
gttaccgtcc cggtagctgc gccctgagag aaattcgcaa gtaccagaag agcactgaac 240
ttcttatccg aaagttgcct ttccaaaggt tggttcgtga aattgctcaa gactttaaga 300
cggacctacg tttccaaact tcggcgggtga ctgcccttca agaagcctcg gaagcatact 360
tggtcgggtt gtttgaagat accaatcttt gcgcaattca tgccaagcgt gtaact 416

<210> 3807
 <211> 370
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-007-Q1-E1-G3

<400> 3807

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tccacccacg cgtccgataa aaggtaaaaa aaaggaaaag gaaaaaaaaa aaggtttaggc 60
taaaaagcaa caaacaaaaa aggaaacctt taaagcatga aaaaaaaaaa atccgaaaaa 120
aaaaagaaaa aggtaagaaa gaggaccgaa tcagggtaag aagtananga gcaagaagag 180
aagagagaat gctgggtgga gtagcgaaac aagagaaggg aagtaaaagg taagaaagag 240
gaaaggttta cgagagaagg aagtagaaag aagagagtgt aaggcggcgt cataatagaa 300
atccgaaagg agtagaagaa aagagagaga agaaagaaaa gaagagaaaa gccgtactga 360
agaccgacac 370
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<210> 3808
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-G7

<400> 3808

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gtcgaagcgg ggcatctttt acaatgcgcc cttcaactgc agttctaaag tttcaaagtt 120
tctgtatact tgcaactgtaa tttttctggc tttttggatc ctatcttctg tctatttgaa 180
acctgtacca tcttacaatg aggccactca acggagggttc ttttacccca caagcaaccc 240
tactcggatc ccaagtatca tccaccaaag ttggaagacc aacgacgtcc cagaaagata 300
caaaagatgg atacagagtt ggaaggaact gcatccaagc tggaaatata tactttggac 360
agaccgaaca aatagaaaac ttgtgcttag acaattccct tggttgattg acatatatga 420
cagactgccca gtaaattattg 440
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<210> 3809
 <211> 440

<212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-G8

<400> 3809

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ggtcctagaa ttccccgggtc gacccaagcg tccgaccacg cgtcgcgcca cgcgtccgcc 60
cacgcgtccg cgcggacata gaatggcaac agataaagtc agctaagaag atatactctt 120
atgtaaaaga atcaaaaacc aaagaatatt tggagctaga cgattcgttg cagcagccag 180
tggattcatc ttgtagcacc aagtggctgt ttattgcaac cccactgttg gaagttgctt 240
gtactgatgg gcagcgaatt gaaatgattc ctttgaagaa agatataaag gaattgtttt 300
tctctacttt aaagaagaac tttgagtcga acgaagcgtc atgggagtg agtgtagttg 360
aaaccgcagt tgctgttttt atccagtatt atgaacagtg cgtggaacag tactatctag 420
caggcaaaga ttatgagcta 440
  
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<210> 3810
 <211> 408
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-H5

<400> 3810

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accacgcgtc cgggtgtgcgg cctgccaaat agtagagaag aaatcgatga aagtgaaagc 60
gagtaaaaga tgaggtatag agaatggcgg tcctaacggg aaggatccaa aggtagcgaa 120
gtaaatagac gtttgaaagg cgtccagtat gaaaggagaa acgagtgcag cactgtctag 180
tcgtccaact cagcgaaaca gcaataactg tgaaaatgca gttaaactagc agtaggacgg 240
aaagacccca taattcttga ctagataggt ttagggagga gagagaatca tgaagtagag 300
gaggtggggg aagagatgaa agaccactgc atgaggataa ggaatctaac tgagtaagga 360
aaataagctt aagctagttt ggctggggaa gttaaagccta agaaagag 408
  
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<210> 3811
 <211> 352
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-H8

<400> 3811

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tttccaaaag gtcctcctcc atatccaagc atcggagttt gctgagttgg ttgtaatccc 180
tgaagaacaa ccgaaggatc ctcgttgatt tgtgcttctt cagcttggtg cttctccttc 240
ttacgctgaa gttgtgcagc tctttcgctt tctaacctac cgagtctcga ggtgaggtca 300
tgtaactttt gaatcatata aggcatagta aagtcggtag cttgatgttg cc 352

<210> 3812

<211> 458

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-007-Q1-E1-H9

<400> 3812

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taagagcaca gtcaaagtgg gagatcaagt gaccgctgaa caaatcgtgg cttgtggaaa 120
ttgtctttat tgtcgcaagg gtcttcgttg gctatgtgct cctcacgata tatttggtta 180
tcacgcttgt gttcacggtg gtatgggaca atatatgcgg tttccagaaa aaagtatcat 240
ctacaacatt cccaagaaaa tttccccttc cgaagcagta tatgtggaac ctttaagttg 300
tgggtgttcat ggagcacaga gaggtcgtat tgaattgggt gatactgtag ttgtcagtgg 360
ttgtggtcct attggcttaa gaatggttgc cgctgcaaaa ctggctgggtc cttctcgtct 420
gatecgctttg gattgtatgg attcaagact agatattg 458

<210> 3813

<211> 116

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-A2

<400> 3813

attcacgggt cgacgcacgc gtccgcccac gcgtccggaa atgtggatgc ctccgatggg 60
ggaaagaaaag aagaagcgtg cttggattgt tatcgttgcc agggttggaa aacaat 116

<210> 3814
 <211> 374
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-B1

 <400> 3814

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 cggagaaatt tatgaattgc acgtgcgcaa ttggggaatg tcgtggggtg cagccattct 120
 tttgggttcc gcattctcag tgagctatac atttaccaga caagtacgag catttacgaa 180
 aactggagta tttggattgt atgcaggatt taccctcatt ttctggttta tccttatcat 240
 tttaatgcct gagacaaatg gaagaacgct agaagatatt cgaaatatat tcgatgaagg 300
 tttaattgga ttggcaaaat acaactggag ccaaaccaaa acatgggtca ggacgaaatt 360
 agggaagcag catg 374

<210> 3815
 <211> 413
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-008-Q1-E1-B3

 <400> 3815

gtagccgtcc ggaattctcg ggtcgacgca cgcgtccgcc cacgcgtccg cccacgcgtc 60
 cggtttggga taatcttcac tccagtcaac caaaatatcg tttagatcag catcttgcag 120
 ctgtaaaagc cattgcttgg tgtccttggc aatctcattt acttgcaagt ggtggaggaa 180
 cggcagatag aacgatcaag ttttgggaata ctacaactgg ctctgttta cagtccatcg 240
 atacaaaaag tcaagtatgt gctttgctct ggaatagaca tgataaggag atcgtcagca 300
 gtcatgggtt ttcacagaat cagctcatcg tatggaaata tccttcgatg gtaaaaattg 360
 cagagttaac tggacacact tcgagagttt tacatttggc tgcaagtcc gat 413

<210> 3816
 <211> 324
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-C4

<400> 3816

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cttctttact tttttgtgat acctgatagt aaagatgaaa gtagagagta tagttttctg 180
tggttttttt ccttgtgtct tgtgaaagta tagagagatg gagtataaaa gacttttttt 240
gattaaaaa ataaaaaaa taaaaaatat aaaaaaatca gaaaaaaaaa gaatagaaaa 300
aaaaaatttt caaaaaatgt atac 324

<210> 3817

<211> 376

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-C6

<400> 3817

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actgtgaaaa tgcagtaaac tagcagtagg acggaaagac cccataattc ttgactagat 120
aggtttaggg aggagagaga atcatgaagt agaggaggtg gggtaagaga tgaaagacca 180
ctgcatgagg ataaggaatc taactgagta aggaaaataa gcttaagcta gtttggctgg 240
ggaagtaaag cctaagaaag agtaaattag gcaagcaaag gcatgagaga agtataatag 300
cagaagcatg cttgaagaaa aagaaagaga tttcagaaag ggaagaaaag tcagctatag 360
agaacagggtg aaggag 376

<210> 3818

<211> 408

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-D1

<400> 3818

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atcaactcgt cgtatacacc gtatcaggaa acctgttcca aaaacgacag taagtgtcct 180
 atatcttcaa caaaattctt ccaactcgat tcaaaaggct ccacggagaa aacaggtaac 240
 aaactgacaa gggaacttgc ggcacttga gtcattacac atccaaagag aactcccaag 300
 aaaaacttgg attttgaaat gttctcttcc atgaacttaa atgttgaaag cgctgataca 360
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<210> 3819
 <211> 398
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-D2
 <400> 3819

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 ggtgacaaaa attgtcgctg tggtagaaaa tgtactgggt tgagtgtgta aacctccaag 180
 tggtgtgacc gttgtcaagg gaagacctgt ggttgacacg gttgcccatt tgaagcagct 240
 actagctaca agaagtatcg ccgtttttca gtataagata cctgagtttg taggagtttt 300
 gaagtgtact catccagaaa acttacatgt tgaaagcgct gatacacgta aggaatatca 360
 aacgctaaga atatgaactt acacctcatc cacgatcc 398

<210> 3820
 <211> 426
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-E1
 <400> 3820

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 ctgcacagaa gatattataa cagcttcgct tcctaggtgt gaaaacctac gttgcgtttc 180
 gactggtcta ttcggctgtc taccagttac tttttcctca taggtcttcg agtcccataa 240
 agacgtcgat ttgtacaaac gactttttct tcgcgatact gtgtttgctg cttttccaga 300

aattactcga aaaaagcggg agcgacactg aatacctgtc cttcctgtgc caagagtcct 360
 tgcaatatct gaccatttac tgccaacttc cttttaaagt ttcaataact tccccgtttc 420
 ctcctt 426

<210> 3821
 <211> 418
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-E3
 <400> 3821

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 ctgctctcgt atttcatcaa ttctttgaag gatttgctgt cggtactact gtttctgaag 180
 cccattttgg cacttgatc actatagtaa tgggtacttg ctattctttg gaaactccaa 240
 tcggtatata gattgggtatt ggtaatgcac acacttatca ggaaaactcc tcggcatctt 300
 tgtaacgag aggcattttg gatgccatct ccggtggaat tttaataac acaggattgg 360
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<210> 3822
 <211> 442
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-008-Q1-E1-E5
 <400> 3822

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 ctgaaaattg gtactcgaga gtttcctgtg gatatgccta aagacgttta tagtcgagta 120
 gccaatatct tgagtattct ttatggagga gacttgaagc gtcaagtata caaaacaact 180
 ttacaccag acgactatca acagttggaa caagaaaagg atttattggt atctctttgt 240
 gcattgtata tatgttatgt caaacgttta aaaggacttc cttatgatac ccttgcaacc 300
 tttcatttag gaaatggagc tgaattatcg gatatatgtt ggatggcaga taattcccca 360
 atggcaatga cgaaaaacct ttgtttaatg gcattattta gttatcgatt ggagtatcaa 420

gaagaaaacg tgattatatt tt

442

<210> 3823
<211> 439
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F1

<400> 3823

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gtatataaac ctcccaactg tacatccttt caagtcgtaa aaaagatacg ttctatcatc 180
ttgaaagaaa tcacttcttc caacgctgga actggtcgca agtggatcaa agttgggtcac 240
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tcgcagcttc aaagttttct tcaaggttct aaagtataca aagcaaccgt gaagtttggt 360
gaagaaacgg ataccatgga tctcactggc cgagtgatag caaccaacc tgttcctccc 420
aaaataacgc ccgatgaaa 439

<210> 3824
<211> 380
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F12

<400> 3824

ttacgctcca cgcagtgtga gttgtcgttg cgcagtgttt gaaagttata gtattactta 60
ttgttcttgg ttggcacact actgatggac gcagaatcga gagagaaatc tgtttacctt 120
tccaagttgg cagaacaagc ggaaagatat gaagaacatg aggaagaaaag aggcaaatac 180
gggaaagcag taaaagaaga aagagaaagg aaaaaactga gtatcaggaa gaaaagaggg 240
agtagatgag gaaagaaaga tcaaggaagt aagagtaaga gaaggagtaa tgtgaatgaa 300
agcaggaaaag tatttgaaga agagagtgtg aagcgcgtac cttttgcata atgtcccagc 360
gagtgaagaa ggaagcaaaa 380

<210> 3825
 <211> 414
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-F2

<400> 3825

tccagaattc acggggtcgac gcacgcgtcc gccacgcgt ccggttgaag aaaaaagagt 60
 tgtctgagga ccaaacagag tgacaagaag agatggcaag gagaatattg ggtgcttata 120
 tgggagatgc cacagtggca actctgttca gtatcaaaat gttgttctat cttactatca 180
 tgggtttctc cataactatc ttggctctca tgggaaagaa ctccgatggg atttggatac 240
 atagtgtgcc acctgcagaa caatattgtg catacaagtc ttcattggag gtgaaccacc 300
 atggaattgc ttcctattgc aagtatatcg ttgccgtagc tgctattggg ttggttatct 360
 cgtttttcca gttttgctac ggtctgttgg gtatcttttt caagtggcaa caaa 414

<210> 3826
 <211> 458
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-G1

<400> 3826

tagccgtcca gaattcacgg gtcgacggac gcgtccgtca tccaccagct attattaccg 60
 agcagctgct cctcagagat ggtatgagga acaatgcacc tcatactgct gggttccagt 120
 acagacctat gaaacttate aatgtttctca agagaagaag aaggagtaca gctatccttg 180
 tcaaacttat gagcaggttt caactactta ccagtgtggg cagtacgagt cccaacaagt 240
 ttactaccaa tgccaaaagt ataaggaggt tactcagcaa gaatgccagt acgtccaaga 300
 gtcgtattgt gtcgagtatg aagaatgtca gcaagttacc caggaagttt ctccttcaga 360
 aattgtctac tacggtgaat cttcttctag cagtagttac tactactaga acacttgtga 420
 aatgcccaaa attcccaaatt taaattgtcc ttttttga 458

<210> 3827
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-G2

<400> 3827

attcacgggt cgacgcacgc gtccgcaaaa atgttathta aaggacggca agacttggtc 60
tatcgaatac cagaactcca actacaacat tgaagtggaa gtgacagaca agaagcaatc 120
ggatatata tatcgttgta atgacaccgt agtaaaggta actggaaagt gcaactctat 180
caccattgat agttgcaaca aatgtggagt tgtattcgaa agctctttga gtacttgcac 240
agtggatgaat tgcgttcag ttcagctcca ggtggagaaa caagctccga gtgtgacgat 300
tgataaaacc gacggcgcaa atatctttat accatcaagt attgtttcgg aaacacaggt 360
tgtttaagca aagtcttcat ccgttaatgt aactgtcaca aatga 405

<210> 3828

<211> 409

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-G4

<400> 3828

attcacgggt cgacgcacgc gtccgcgcga acgcccgaat tttgtgtttc tcatgaagcg 60
ttattattac cttacgaaga agcactaacg agatatgacg aggaaaccgg caaatattat 120
gcaacttctg gtcattttct atgggttgga gatcgtagca ggcagccaga ttgtggacat 180
gtggagtttt taagaggcat cgacaatcct atcggcatca agtgtggacc atctttggca 240
gtggatgatt tacttcgttt gttggatatt ttagatcctg ataatgagcc tggacgtatt 300
acactgattg ttcgtgttgg agcgggtcga gttgccgaac atcttccaag gtttgtaaaa 360
gcagtgcgca aggaaaatag acaagtcgtg tggagtgtg atcccatgc 409

<210> 3829

<211> 205

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-008-Q1-E1-H12

<400> 3829

agcaaagtca atggaaaagg aagaggaaag gcgaaaaaag tagcgaataa accgagaacc 60

ttacctctcc aagaaggtgt tgcacggctg tcgaaagaac gtgctgtgaa gtgagagaac 120
 gtacgagaaa gccaaagtgag gaaaagaagg caagtagagg gcggcccagag aaaggagagg 180
 gcgtaagacg tgatacagag taaaa 205

<210> 3830
 <211> 415
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-A1
 <400> 3830

attcccgggt cgaccaagcc ttcgaccaac ccttcggcca acccttccaa aaatgatgat 60
 gacatttgtg aacccttgtc gcccttttac gggactttgg aatcctttga taaaggtatc 120
 atcttgccctt aaaaatatac tagaatggtt tcatattatt gtctactatg ttgggatggg 180
 ggctcgcctc aactcttggt gtgttgccac aaatctgtac tttttgcgag cttctgcaag 240
 tcttccacaa aagtcaaaag caataccttt tctcgatcgt ccgcctgctt tggatggttc 300
 catggttggc gatgttggtt tcgatccttt gaatatctcg tcctatttag acttgcgttg 360
 gttacgagaa tccgaactca aacactgtcg cattgctatg ttggctgttg tgggt 415

<210> 3831
 <211> 370
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-A12
 <400> 3831

attcacgggt ccacccacgc gtccgaaatg tggaaatgga agaaaatgcg gaagaagttt 60
 tattcacttt taatagacct ttgaaatat acgatgacca agtcattttg caaggaatat 120
 ttcgaaacac aaatgtttcc aacagaagag acgaacatga aaacgtatcg gtttctgaga 180
 agcaagcata ttcaagtaat tctagacagt ccagtgagcc aagtcaacat tcttgtcttc 240
 gaactagttt actgtctaga aacactgtag ataatagtat gtttaatagc catttggttt 300
 acctaacaga tgatgtctga ggtcgtcaaa gttacggttg ataagcagta aaaactgact 360
 gatatgtggt 370

<210> 3832
 <211> 461
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-009-Q1-E1-A3

 <400> 3832

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 tactactagg aatgaccctt cgtaaaccag tctttaccaa agtagaaaaa ctacaacccg 120
 ggacacaggg gcacaacttg atcgttcaag tgatgaacgt cgggtgaggtt atggaaaaag 180
 tgagaccgag tgggtgacaaa ctgcaaactg ccgaagtgtt acttgacagat gaaactggag 240
 cgggtattatt tacagcaagg aacgaacaaa tcaaactttt taaaaaggga gagtgtgtga 300
 ccgttcgaaa cgcaaaagtc aatatggtgc gaggccttat tcgttttagta gttgacaaat 360
 ggggagctat taagccgcct ggaccaacgg aaaagttaca aggaccacca aaagttnaaa 420
 accattatatt caaacataga atatgaactc gtgtaagaca c 461

<210> 3833
 <211> 395
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-009-Q1-E1-B10

 <400> 3833

ttcaagggtc cacccacgcg tccgaaattg agcaatgtac aggggaagtat gacccagtaa 60
 tgaggagtgg agtaaacaga aaaggaagta aaaggaggga atgaaggga gttatggcaa 120
 aaacacgtgc cagcagcagc ggtaaaacgt gtgtagcaag cgtagagcag aagaacatga 180
 ggaagaaaga ggcaaatacg ggaaagcagt aaaagaagaa agagaaagga aaaaactgag 240
 tatcaggaag aaaagaggga gtagatgagg aaagaaagat caaggaagta agagtaagag 300
 aaggagtaat gtgaatgaaa gcaggaaagt atttgaagaa gagagtgtaa agcgcggtacc 360
 ttttgcataa tgtcccagcg agtgaaagag gaagc 395

<210> 3834

<211> 449
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-B11
 <400> 3834

attcacgggt cgacgcacgc gtccgaccac gcgtccggac tacttagtga tcgtatatcg 60
 caacttaaag ttgagttgga atatgttcgt tcgcacaggg caagacaacg aaagaaaaga 120
 agacattttg aagttcctgt cgttttctctt gttggatata ccaacgctgg aaagagcact 180
 ttattgaatg ctttgactca tgetcaagta ctagtacaag acaagttatt tgctacatta 240
 gacccaacaa ctcgaagatg tcgactacct ggacttcattg tgcaccccgga catccttatg 300
 acagatactg tcgggtttat ccaaaaaactt ccgactactc tagttgccgc atttcgtgct 360
 accttggag aaatagctgc tgcagatatt cttttacatg ttgtcgatat ttcattctct 420
 tccttcgaat ctcagcaaca agctgtcat 449

<210> 3835
 <211> 468
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-B12
 <400> 3835

agctgcggta gcggtcctac attcacgggt ccacgcacgc gtccgaccac gcgtccgccc 60
 acgcgtccgc tcttgaagca ctgaagacgt tgaacgttgc ctctcccaac cacaagacaa 120
 gatctaacac tccaacaact tctagtagta accgaaaaac aacacctgac ttttcggaat 180
 cttctcggtta cctctcctct ccatgctcta caaagatgg aaaagtacga gtccctagaat 240
 ccgaatttga gaagcacgtt gcaccctttg tgaacatag tgtctctgta tcagaactat 300
 ctgaaaaact tcatttactg catcaggcat cttctaactg aaactcgaag cgattcagtc 360
 agtccgaact ttctaaaatc tttcaagcat cgagtagcaa gcttaagcta tattgcctcg 420
 ctcttggtca gctaaaatat cttcgaataa aaagggatga tctagttt 468

<210> 3836
 <211> 396
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-B2

<400> 3836

cgggtcgagc cacgcgtcca cggaagcgtg ggatgaaatg cagagatctc tagagaaagg 60
caagaaagaa aagaaaggaa gacacagtaa atgaggcgag aaagcatagg aagtgaaacg 120
gattaggaac ccgtgtagtc tatgcagtaa aagaaagaat gagtaagaaa aaagggagtc 180
attccaccag gggagtaaag gcgcaagaaa gaaacccaaa gcaattgacg ggaatcggaa 240
aaaggggtgg atcacgtaaa ttaatccgat ataaaccgag aaccttacct ctccaagaag 300
gtgttgacg gctgtcgaaa gaacgtgctg tgaagtgaga gaacgtacga gaaagccaag 360
tgaggaaaag aaggcaagta gagggcggcc cgaaaa 396

<210> 3837

<211> 313

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-B4

<400> 3837

gggtcgagcc acgcgtccag ttcaggttga cgatcctgag aagattgctt gaaactttta 60
aaacaaactt tggttgtcgc gcaactctct atcgagtttt tgggtatctg cagtcggaac 120
aactacttgc gtgcatgctc tcgtgatcac tatataaaaa gtagtctctt ctaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ataagaaaaa aaaaatagaa taaatcacc 300
taagaacaat tca 313

<210> 3838

<211> 409

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-B9

<400> 3838

acgcgtccga aaatggcggg cctaactgta aggatccaaa ggtagcgaag taaatagacg 60

tttgaaaggc gtccagtatg aaaggagaaa cgagtgtagc actgtctagt cgtccaactc 120
 agcgaaacag caataactgt gaaaatgcag taaactagca gtaggacgga aagaccccat 180
 aattcttgac tagataggtt tagggaggag agagaatcat gaagtagagg aggtggggta 240
 agagatgaaa gaccactgca tgaggataag gaatctaact gagtaaggaa aataagctta 300
 agctagtttg gctggggaag taaagcctaa gaaagagtaa attaggcaag caaaggcatg 360
 agagaagtat aatagcagaa gcatgcttga agaaaaagaa agagatttc 409

<210> 3839
 <211> 433
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-009-Q1-E1-C10

<400> 3839
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 ccgaaacagg tggactactt gggcgccatt catgtcgcag aagcggcagc ccaagctaag 120
 gttaaacgtc tcattcttggg aagctcagca atgggtgacta accgaagtgc attcccttat 180
 ttgttcttga actctgcatt tggacgaatt atgcattgga aaaggcaagg agaaattgga 240
 gtcatacaag ttcattgagaa aaatccagaa atgggttata ctattgttcg cccaggacac 300
 ctgataaatg agcctgccaa agggcccaag tcagtaatag ttgatcaagg tgatcgcatt 360
 agttggaggg ttactanagc ggacgtagcg aaagtatgct gtgcttggtt aaaagtcgaa 420
 aatacatgga atg 433

<210> 3840
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-C2

<400> 3840
 gggctgagcc acgcgtccga ccacacgtcc gccacgcgt ccggcagcat gatgaagagc 60
 gctatgaagt tctttgtatt tagcattatt ttggcaaatg ttgttcttac tattcaagca 120
 gcaacgggtt tggagacttt ggagtcactg aaatatacag agtatcttga catggtaaag 180

gctgcaggcc tggactcgaa gttcaacgac tctgctgtta catggactgt ttttgcagca 240
aacaatactg gagtcaatgc caccttggca ccaaagcaact tggttatttc taatatcaca 300
tctaatacgga cggagagcaa agacattgtg gaatatactt tgtacaacca tactcttttg 360
tcagatgata ttaagacagg aacaactatc cttaccgccc taaac 405

<210> 3841
<211> 455
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-C3
<400> 3841

gggtcgagcc acgcgtccag gaagaagcag agagggacta tgagcgagaa ggtggatagt 60
cgagagggaa aaagcccaga agccaagata aggtatcaaa gtaaagaaag aaggaaaagg 120
agaagaagag agggtaggct tagaagcagc aaaccagaga ggaaagcgtt aaagcatgaa 180
agaaaagaaa tccgaaaaag aagagaaaaa ggtaagaaag aggaccgaat cagggttaaga 240
ggtagaggag caagaagaga agagagaatg ctgggtggag tagcgaaaca agagaaggga 300
agtaaaaggt aagaaagagg aaaggtttac gagagaagga agtagaaaga agagagtgtg 360
aggcggcgtc ataatagaaa tccgaaagga gtagaagaaa agagagagga gaaaggaaag 420
gaggagaaaa ccgtactgaa gaccgacaca ggtac 455

<210> 3842
<211> 334
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-C4
<400> 3842

cgggtcgagc cacgcgtcca cccaagcgtc cgggaaaacg cgaggtcatt ggatatactt 60
tggaagcagc ttacagaaa acttgtattg tggaaaacca gttgaggag tggaaaaaga 120
aactcgatag tctagcagac aattattcgt tgggtacgag agcctatgat gcgagaatgt 180
ggtcattgga cctcatcgca actattatga gtgtctgttt tgcagttttt ggaatgtttt 240
cacaattctt tggttattat gtccaattgc ccatttacia tatgggaaat gccagtcagt 300

attactttta tggcgtgatg ggaggtatth ccgt

334

<210> 3843
<211> 439
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-009-Q1-E1-C6

<400> 3843

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acgagtgtag cactgtctag tcgtccaact cagcgaaaca gcaataactg tgaaaatgca 120
gtaaactagc agtaggacgg aaagacccca taattcttga ctagataggt ttagggagga 180
gagagaatca tgaagtagag gaggtggggg aagagatgaa agaccactgc atgaggataa 240
ggaatctaac tgagtaagga aaataagctt aagctagttt ggctggggaa gtaaagccta 300
agaaagagta aattaggcaa gcaaaggcat gagagaagta taatagcaga agcatgcttg 360
aagaaaaaga aagagatttc agaaagggga agaaaattca gctatagaga acaggtgaag 420
gagaactcan aaagaggag 439

<210> 3844
<211> 397
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-C8

<400> 3844

gaccacagag tccagattgc gctgcaaagg agtgggctgc ggtgaacctt tcaactagtc 60
ttcttgtaat ttgctgccat gggctcttcc atctccaagt tattatcgcg tttatttgga 120
aaaaaagaaa tgagaatcct tatggtaggg cttgatgccg cgggaaaaac taccatatta 180
tacaaactca agctgggtga aatcgtcacg acgatcccca ctattggatt caacgtggaa 240
accgtagaat acaaaaatat cagttttacg gtgtgggacg tcggtgggtca agacaagata 300
cgaccttgtt ggcgccacta cttccaaaac acccaaggtat tcatcttcgt agtggacagt 360
aacgacagag agcgtttccc cgaagcacgg gaggagc 397

<210> 3845
 <211> 435
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-C9

<400> 3845

attcacgggt cgacgcacgc gtccgaccac gagtccgctt gggtcgaagc tacttatgaa 60
 gagttggaaa gtattttatg gagtgtgatg tggtcacaag atgaattatc tgctcagttg 120
 gcctcttata tggaaaagtt gacagagttg gaaaagacag aacaaagtat agttgtggga 180
 gaaggtctgg aaaaattgac agatgccaga cacttggtga ataaaacaaa gaccaaactg 240
 gatagtgttg ttactagatt agaaagactg cttcttctga cgagtgttcc gtcagtttcc 300
 aagagagaat agttgtatcc atagttttgt gcaagtggga tgtttactgc tctatagtgc 360
 agataaaata gaaaagctag agccgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaaag 420
 gaaaggaagg gagag 435

<210> 3846
 <211> 379
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-D1

<400> 3846

actgtctagt cgtcaaactc agcgaaacag caataactgt gaaaatgcag taaactagca 60
 gtaggacgga aagaccccat aattcttgac tagataggtt tagggaggag agagaatcat 120
 gaagtagagg agttggggta agagatgaaa gaccactgca tgaggataag gaatctaact 180
 gagtaaggaa aataagctta agctagtttg gctggggaag taaagcctaa gaaagagtaa 240
 attaggcaag caaaggcatg agagaagtat aatagcagaa gcatgcttga agaaaaagaa 300
 agagatttca gaaaggaag aaaagtcagc tatagagaac aggtgaagga gaactcaaaa 360
 agaggagagc accgaacga 379

<210> 3847
 <211> 444
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-D10

<400> 3847

cggtcgtaga ttcacgggtc cacgcacgcg tccgaccacg egtcgcgcca cgcgtccgcg 60
gacgcgtggg gcaggtttgt caacagtatt gccaaactatc gtaccagcag tcggttagtt 120
atccatgtca aactcagata tattatcctt gtcaagaata taagttgatg caaatcgagc 180
aatgttgcca gatccctcag ctgaagtgtg tacaatacac gcaatcttgt gttattcaac 240
aaattcaaca acaacagcag caacaacagc agcaacaaca gcaacaacag cagcaacagc 300
aacaggaaga gcagcaagtt caacaggaag aacaacaagt tcaacagcaa gagcaacaag 360
ttcagcaatt gcagtattat ggatagttat tttttatatt tgtgattttc ttgtggacgt 420
gccaaagtag cacaaaagtt gttt 444

<210> 3848

<211> 442

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-D12

<400> 3848

ttcacgggtc cacgcacgcg tccgaccaat ttgtacaatt cttataaacg tggattccgt 60
accaatggag tatcttttgt atgtattttg tcgattgcat tatgtcgtct cttgattatg 120
cctttgttgg gttggtcacg gatacagtta ttattgcact ttggaatatt atcggatcga 180
acggacaata ttcaattggt ggtaatgatg atagaaacgg cagtaccatc ggcaaacaat 240
gtggtgatta tgtgtgagat ggttgaacg agtgaagagc ccatttcgtt ggcgttggtg 300
tggcaattta tattggctcc cttgtttttg acggcaaata tggcggtttt cttgtggtct 360
ttgaaatagt ttaccaattc acacgttga tatattgggc atctatgtat gtttgtgtgg 420
aaaagaataa atccttggtg at 442

<210> 3849

<211> 357

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-D2

<400> 3849

ggtcgagcca cgcgtccaga aaatttgtag tgaccttggtg gaccatcgaa aaatatttcc 60
tcgtcaactc caaactattg attgcgattg agtagagtta tagtgtgcca acttgtggac 120
aaggtcattt gtttgaagct tcttttggca taacaaaaag ctttcgtccc cggatgcctt 180
tctgaaagga agaagaaggc tgaacatag gtaggtgttc actgcagctc aaagtaggaa 240
aagtgcaa atagatctttat tcatttgttt ggcactacta ctacacatga aatcttggag 300
acccaccat attcaactag agtctcactg gtagtataaa attctcgttg tgttgcc 357

<210> 3850

<211> 456

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-D4

<400> 3850

acgcgtccag agaaaaggc caaacaagag aagtcagcag tggggaaaat tgggcaatgt 60
acagggaagt atgaccagt aatgaggagt ggagtaaaca gaaaaggaag taaaaggagg 120
gaatgaaggg aagttatggc aaaaacacgt gccagcagca gcggtaaaac gtgtgtagca 180
agcgtagagc agaagaactg ggtgtaaagg tcgagtagta gagtaagtgt aaaagggaaa 240
ggaaaggaga gaaagaggaa agggatgaaa tgcagagatc tctagagaaa ggcaagaaag 300
aaaagaaagg aagacacagt aaatgaggcg agaaagcata ggaagtgaaa cggattagga 360
accgtgtag tctatgcagt aaaagaaaga atgggttaga aaaaaagggg atccatccca 420
ccagggggat taaaggcgca agaaagaaac ccaaag 456

<210> 3851

<211> 307

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-D8

<400> 3851

aaatgatcct agagtaaaac aacgtgaaag tgaccaaatt gttaaagcaa tgttgaaaa 60

gaatattccg gtcgaatacg tcttgtatcc agacgaaggt catggttttg cgagaccacc 120
gaaccgctta gacttttttg gaagagcaga agtattttta tccaaatata tgggagggcg 180
ttgtgaaccc tatgaaaaag ttcttgaag tactgcgcga ttgcctattc aagaaggtct 240
cctttcgtag cttttatgaa aataaagtct ttggttagca cttaaaaaaa aaaaaaaaaa 300
aaacaaa 307

<210> 3852
<211> 408
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-E1
<400> 3852

gggtcgagcc acgcgtccga ggatgttcga gctgctggct ttttgatgca aaaggaattg 60
gagtattttg aaaaggcatt gaagaacca aagagacctt atttagctat cttgggagga 120
gccaaagtat ccgataaaat acaactcatc cagaatttat tacaaaaagt ggatgaaatg 180
attatcggag gtggcatgtg ttatactttt cttcgagtat tatattccat gccgattgga 240
gactccattt atgatgagcc tggatcacat ttggtagaaa atattatgaa agaagccaaa 300
gaaagaaatg taaagataca ttttccagta gattttgtag tagccgatcg tatggctccc 360
gatgcacata cagagatacg tactagagaa caaggtattc ctgagcat 408

<210> 3853
<211> 436
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-E10
<400> 3853

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tacatgtggg ttgtatacac caaaaacggt ataaaagatc cccaagtact ttatatccca 120
aaggaataag acttgtatgt gtatccaaaa aagccaaaga aaaaaacgac tggggtttcc 180
gaccacccga tattcctacg atggaagaga gatatgcagc ggaacttgcc tatgtagaag 240
aaaagtttgg accaaagaga tatgaaactc ccgaaaaagc cgacgcattg aaaaaagaa 300

tacttggttaa tcaagagtgg gcgaaacaag aacgcagtca aggcttgaaa caatatcaag 360
atattaaagt tacgatactc ggagcaactt tgggaattgg tgcgtttctt attccttgga 420
tatggtgggtt gggttc 436

<210> 3854
<211> 373
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-E2
<400> 3854

gggccagaat taccgggtcg agccacgcgt ccgaggaata tgaggaggag tggctgtctc 60
tttgctctc caaagggact ttattggaga agattcttct ctacagaata tgattataca 120
ggaggaactg gaagagaatc cacaggattg tcggcttccg aacaagaagc cagagagaaa 180
gtaatacgtt tgtatcgata tgcgctaagt agtgtcaaag atattcgcaa acactatcgt 240
ttaaatgaaa gcaaagaaga tatagctgct tgtattcgag atttatttga aaggcataaa 300
catgttcaag atcgaaagct tattgatatg ttggtgttca agggacgaca agacatagac 360
gaagttcgcg ccc 373

<210> 3855
<211> 306
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-E3
<400> 3855

ccgggtcgag ccacgcgtcc aggtggttgg tgacgacgac aggttttcgac gtcgacgatg 60
cctaaacaaa tcaaagatat caaggaattt ctgcttttgg tccgcagaaa ggatgcgaga 120
gccatcacia taaagaaaaa caagaccaac acgaaattca aagtccgttg cagcagatat 180
ttgtatactt tggtagtgaa agaaaaggac aaggcgaaca agttggaaca aagtcttcca 240
ccaggtttga ctttgaaaaa gattgattag aaataaactc tatcgttggt gttcttgtga 300
tggatc 306

<210> 3856

<211> 261
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-009-Q1-E1-E4

 <400> 3856

 gcgtccatgt aaattcaaca tcatcaaatg ccaaagggag gaaagaaaga ttcttcaaag 60
 aaagaagcca caagtaaacc tgcagcagca gatgctacaa agacgacaga aaagtctggt 120
 ccggaagcca agttgaaggg aactggtgca aagaaacaat aaaaagttga ctatgcatgt 180
 tctgttatg tttgtgagt tctgtttgat agtttccagc tattcttttg gtagtgaata 240
 aagagaaaat tttttatatt t 261

<210> 3857
 <211> 393
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-009-Q1-E1-E7

 <400> 3857

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 ctctcttatg tggatgaacag gaaggacag aagaaagtcc agtcaaagta aaactagtaa 120
 aacctcctct ttatgttgtt acaaccagct gtcttgataa gaaacaaggc atcgaaatct 180
 tacaacgagc agtagaagcc ataaagacca agattttaga gaagaatggc aaatttacca 240
 tcaaagaaga gccacgagct atcagcgata gagatgacag actgttgtct cgattaatgg 300
 atgaattaga agcagagaat cgtgaagtaa gtggtgatga agatgaaagt gacgaggaac 360
 aagacgaaga aatgatggaa gaggaagaag aat 393

<210> 3858
 <211> 372
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-009-Q1-E1-E9

 <400> 3858

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ccctttttgt ttgtttatcg tttgtcaaag tttgggtgtt ttcttggtag cagttgtaca 120
 ttcaacatca tcaaagcca aaggaggaa agaaagattc ttcaaagaaa gaagccacaa 180
 gtaaacctgc agcagcagat gctacaaaga cgacagaaaa gtctgggtccg gaagccaagt 240
 tgaagggaac tgggtgcaaat aaacaataaa aagttgacta tgcattgtgca gtcctgttat 300
 gttttgtgag ttctgtttga tagtttccag ctattctttt ggtagtgaat aaagagaaaa 360
 ttttttatat tt 372

<210> 3859
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-F1
 <400> 3859

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 ttgtttcaac aatacaagca caaggctcta gtactcttgc tccaacagga gttagttcta 120
 ttctactag tgctgttaca ggcgtacgg gaataccaac tagtttccct agttcggttt 180
 ccacgggaat accaaccagt gtaccaacaa catcatcttc gattactatc cttactgtct 240
 tgcaagacaa ccactttgac gatacagtac aagctataaa tgcggcagga cttgactctt 300
 tgtttaacaa tccttccgct actcttactt tctttgcagc aaatgactct gtatggctta 360
 cttctacagc ttctcaagct ctgagtgttc ttccaaccag tgcacca 407

<210> 3860
 <211> 369
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-F2
 <400> 3860

gcgtccaccc aagcgtccgc ccacgcgtcc gccacgcgt ccgagaaaga ggcaaatacg 60
 ggaaagcagt aaaagaagaa agagaaagga aaaaactgag tatcaggaag aaaagaggga 120
 gtagatgagg aaagaaagat caaggaagta agagtaagag aaggagtaat gtgaatgaaa 180
 gcaggaaagt atttgaagaa gagagtgtaa agcgcgtacc ttttgcataa tgtcccagcg 240

agtgaagag gaagcaaaaa gaaagaaaaa gaagtagcca ggtaagaccc gaagctagtt 300
gatcttatgc tgtccaagcg aagtaaggct gaaccagtat ctgtggaaaa agatttggaa 360
gagatggca 369

<210> 3861
<211> 404
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F3

<400> 3861

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gatccttctc gagttggact atcttccaag tcgctagtag atgaaattat cgatgttata 120
gaaggttggtt attctagtct gcatagagaa ctgtattctt ccatatgttt ttccgggtggt 180
acgtcgaacc taacaggtct tttggaatat ttgacggtag cacttggttag aagaatgcat 240
aaagttaagt tgcttggttc gaatgtagaa gcagaacgac gatttgctgc atggactggt 300
ggttctatgt tagctacttt tggagagttt cagaagatgt ggctttcaaa agctgaatat 360
gaagagaacg ggaaaacttt tattcataag aaatgtgcct agat 404

<210> 3862
<211> 394
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F4

<400> 3862

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aaacgacttt agtaagtttt gtcgctcacg acaaattctt tcaaagtcgt tcttttgaca 120
acaaactaac ttgaaactgc gcttgtgaat aagcttccaa ggtacctttg gtttccgcaa 180
cggcggaagc aataaaaagg ctttctttct caccgccatt ataacgccac cttttggaga 240
atttctgaaa cattccaacc cgcagaacaa ctttcagtgt cgaatgccag aggatacatt 300
agaagacttc tacttcagtt atcatcattt ttcgagaatc aatttgcaaa aacttgtaat 360
aactgcaggc aaagcaacag taaatggcca tgac 394

<210> 3863
 <211> 442
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-F9

<400> 3863

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ttcacgggtc caccacgcg tccgaatttg agctctttgg gaagcatgac gtctatttgg 60
gaggcatcca aacaactcct ttatcattac aaaaacacag ttccttacca cttaaagggt 120
atcgacgctt ttctcttgta tgtcttttct actgctgcca tccagtttgt ttacgtcttg 180
ttcggtggga cctttccttt caacgctttc ttggcgggtt tcttctcgtg tgctggagtt 240
tttgtgttga cagtggcctt gcgcagcaa gtgaatccgc ggaatcagaa cgcagccaat 300
cgatgggaaa aagtgaacct ctaccgtgct tatgtagaat ggctgttttg taacttgatt 360
ttgcatattg ctgtaatcaa ctttatttga tgagagaata gtacgcgacg atataaagtt 420
atgacgatgg acgtacact gt 442
  
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<210> 3864
 <211> 350
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-G1

<400> 3864

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ttgggaaaaa cttgttttat cagcaacaga tactgccaac gcgcgttcgg tcatagtaat 120
gaaagacgat gtggacaaga tattggagct ggatagtcac aagaccttag ctatgggtgg 180
ggagccaggt gactttgtgc agttcacgga gtatatacaa aagaatcttc acctttacga 240
attccaaacg ggattgcaac taagtactca cgcagttgct aacttcatcc gtgggggaat 300
tggttagatt gatacgggga agccccgtat taaccaaact acttttgggg 350
  
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<210> 3865
 <211> 428
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-G10

<400> 3865

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taacaactat cagcaccaca aaaagatggt tcgtatgagt gtattagccg atgctttgaa 120
atccatcgcc aatgcagaaa gaagaggaaa gcgtcaagtt ctcacccgcc cgagctccaa 180
agtcatacata cgcttcttgc aggttatgca aaaacacgga tataatggag agtttgaata 240
tgtggacgat catcgctcgg gcaaactcgt cgttcacttg ataggcagat tgaacaagt 300
cgggtgtgata tcaccacgat atgacatgaa agtgcacgaa gtagagcaat ggatcaataa 360
cttgcttcca agtcgacaat tcgggttcgt agttttgaca acatcgtatg gtattatgga 420
ccacgaag 428

<210> 3866

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-G12

<400> 3866

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ggtaggctta gaagcagcaa accagagagg aaagcggtta agcatgaaag aaaagaaatc 120
cgaaaaagaa gagaaaaagg taagaaagag gaccgaatca gggtaagagg tagaggagca 180
agaagagaag agagaatgct ggggtggagta gcgaaacaag agaagggaag taaaaggtaa 240
gaaagaggaa aggtttacga gagaaggaag tagaaagaag agagtgtgag gcggcgctcat 300
aatagaaatc cgaaaggagt agaagaaaag agagagaaga aagaaaagaa gagaaaagcc 360
gtactgaaga ccgacacagg tactcgagga gaaaggagac ccaaat 406

<210> 3867

<211> 390

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-G2

<400> 3867

cggtcgagc cacgcgtcca cggaagcgtg gggagcatgg tacgagaagc tttattgcag 60
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 caccgagttc ctgaagagtt gattctggat acggttaagat agatgatcct attttctgat 180
 ggatatgtat acatatatac tgctttttcg tgtttttggt gtatagatat tagaaaaaca 240
 tttttcacct gcagaatctc gcagacagtt ggaagtagcg ataggttaga aagtgagtat 300
 gatataattg taatatactc agaataggag atagaatggg gaagatatgc ggaactcttt 360
 ggctatgatg caccgagtgg cgaactgttt 390

<210> 3868
 <211> 335
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-009-Q1-E1-G3
 <400> 3868

gggtcgagcc acgcgtccga ccacgcgtcc gggcgaaaac accccgacat aagtccgtgg 60
 acaaacttta aggcttgctt tactggtttt ggaacagctt tggcactttt taccggttat 120
 gttgttttag aacaggctta ttactatttt tacaagccta cacagacgca agtccccgag 180
 acgaaatcgg aagaacttgg ctcttgagtt tcgtgttctt gtaaagttgg aacctcacgt 240
 ctatccctac atggtgtcaa agacaggcca ctgataaggc taagggtttg tcttcgttcc 300
 ttgggccaaa gtaataaaga gtgttatgtt ttctc 335

<210> 3869
 <211> 438
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-009-Q1-E1-G9
 <400> 3869

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 tggacagcgc ctttggacag gcaaagactt tatagaatat gtcaagttga gatggggaaa 120
 tcctttatct cgtagaaatt gctgttggtg tagtacaggc agtatagtat cttgtgacac 180
 tggaaagggt ttacagagtt gggtttcgtg tgagttgttg agatcaatag tacgattatt 240

taggtcggttg cactgcttga aggggttagaa ttaggaatgg tgaagagtat atcccaacca 300
tctagtaatc aagcaacagt agaagctcta gtttcctcga aaaaactgta ttttctcaag 360
gatccagtaa caggaaagta ttggaccgaa cgagattcca nacgagtaaa tccaatgttt 420
tattctcagc aagataca 438

<210> 3870
<211> 349
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-H1
<400> 3870

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cccaaagcaa ttgacgggaa tcggaaaaag gggtggatca cgtaaattaa tccgataaac 120
cgagaacctt acctctccaa gaaggtgttg cacggctgtc gaaagaacgt gctgtgaagt 180
gagagaacgt acgagaaagc caagtgagga aaagaaggca agtagagggc ggcccgtaga 240
gcagaagaac tgggtgtaaa ggtcgagtag tagagtaagt gtaaaaggga aaggaaagga 300
gagaaagagg aaagggatga aatgcagaga tctctagaga aaggcaaaa 349

<210> 3871
<211> 396
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-009-Q1-E1-H2
<400> 3871

gggtcgagcc acgcgtccgc aaggaagaac agatggaagc cacaatagaa ttggtggtaa 60
aaagtaacct ttctaacc aa atgagacttt ttgaatggaa agctgaacaa gttgttgtgg 120
cagtagaatt accacaaagg cttttgcaag tcaaagtcaa gtcattgcaac ggaggaaagt 180
ggaaatggtc caaagaacaa agttggtttt tttgggagtt gaagaaagct tcttcagata 240
gagaatataa attgaatgca gatattgtat ttgatgctcc tttggacaca agaaaaacac 300
tgtatagtgt gatagatgtc cattttgtta ttctgatga aaccttgaca ggatttagta 360
tattaagttt gttggtgaag gagccaaaat tggact 396

<210> 3872
 <211> 399
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-H3

<400> 3872

gggtcgagcc acgcgtccga ttcaagtgtt gcaactagaa aacaccctag caagttgttc 60
 aagttggcac tctcgtccat ggcggcaaac ggaaagattc gggtgaaaaa ccctgtcgtc 120
 gaactggatg gggatgaaat gacccgcatac atatggtcac tcattaagaa caagtcatt 180
 ctcccatatc tagacatcga cttgaaatat tatgatctag ggttaccaa cagagacaaa 240
 accaacgatac aagtgcgat agacgctgca cacgctatcc agcggtaaa cgtcgggtgc 300
 aattgtgcga ccataacgcc tgatgagcag cgagtaaaag agtttaatat gaaaaagatg 360
 taaaaatctc cgaacgcaac gattcgtgga atcttgaac 399

<210> 3873
 <211> 438
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-009-Q1-E1-H9

<400> 3873

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 aaagcctatg aacgagtcga agcactgggt ttgctgtaca atgaccacat attttccgat 180
 aaagtttata gttatcaaga tgcgttggtg cacaatcagt ttcgattgcg agatattctt 240
 gattttggaag cacatggtaa gtgggtggtg ataatggagt agaagagatt gagtgtgtgt 300
 aaaagctcgt ggacaacgcc gcgtgttgta tcgattgcaa ttggaaacgc ggagtttata 360
 tcatccgttt tttatgcggc cattggtgaa tcccatgggc caagtaagaa tttattgttt 420
 tcaataatcc aataaaaa 438

<210> 3874
 <211> 376

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-010-Q1-E1-A2
 <400> 3874
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 aaatatggaa ggctcagaat caaattcaac gtcaaattcg aatatccgca cacgttaaga 180
 ttaccatgac atccattgag catcacattt cttttacaaa tgcacaaac tctagctcat 240
 ttacctgctt atttcgaaaa cctattacac ttaattcgag ataggtacaa actgacgttc 300
 atcatatggt accattctaa cttgaaatac acagctttta cggcaggtat acaagcagta 360
 gcaaaatata attcct 376

<210> 3875
 <211> 333
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-010-Q1-E1-A5
 <400> 3875
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 tgaacattct ctaaactata taaggcatca tgatatagag attcgatttc ttcagcctgt 180
 tctgataact ttgtggataa aacctgattc agtgcagcta tttcaacagc ctgtttttct 240
 acagtcttga cttgctcaag tgtctccatg agttccacta acaaggtctc attctctcct 300
 tccaataaaa gctgcttcg gtcttggtt tcc 333

<210> 3876
 <211> 368
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-010-Q1-E1-C1
 <400> 3876
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aggcaccgtg gaagtagagg cgatgaacgc tttacaagtg ggacaaattg agaaaaccta 120
 tgaaggccta actagtttac agcgtgaatt ggatagtgtc cttgctagtc agtattatTTT 180
 gagaactcgt ttgatgcggc atgaacaaac ggtgatggct acgaatagag cagttttggt 240
 atttctgttg ctcaaaacgc tgtttgttgc ttgtctagtt gctgtcaaTt tgtattttgt 300
 gaagcgtttg tttgacgatc cgaaacgcgt acgcatgaga gtataataaa gccattgttg 360
 ttttggtt 368

<210> 3877
 <211> 304
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-C2

<400> 3877
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 acacgttggT tgagttgtag aaagcatttg ataaatttcc cgcgaggaat cctacttggg 180
 acgtgtcctc caatgctgca gagagctatt cggtatgtct gtttattgct tgttttcata 240
 agagagagag agttggacat cgaataaaga aaaaaccaca caaagtggaa caacataaac 300
 aaaa 304

<210> 3878
 <211> 398
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-C3

<400> 3878
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 cacagcaagt tgccactttt tgtctcctcg aaagagaaaa ctacttcatg catgtgcaaa 180
 aggaaacatt gatacagtta gggatctgat tcaagacgaa aaagtctcac ccaactttta 240
 caactatgac aagagaacgc cactacattt agcagcagct gaaggacact tggaaattgc 300

acaaatcttg gtagaagctg gagcgtcttt aactacttat gatagatggg gatgcacacc 360
tctcttcgac gctgttcacg ggaaacatca aagactga 398

<210> 3879
<211> 372
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-C5

<400> 3879

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ggaaggagat agaagaggaa tggagaagat gggagaggat aaagcagagt agagaagagg 120
agggagtaga agaggagttg aagttatgga aggaagagaa taaggagagg atagaaagaa 180
tgaataaaag aatggaagag tacttaagga ggaggataga ggagagaatg aggaagtact 240
tggagcagat agaaaaggta gataggagta tagagttaga ggaagagaga gtaggagagt 300
ggaagatgag tgaggaggag atagaagaag gcatagaagg aaaattgggc aatgtacagg 360
gaagtatgac cc 372

<210> 3880
<211> 414
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-C8

<400> 3880

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ctttaagcaa tgcttgattc tagtgagtt ttccgataac ggagtatgaa gcttagtatg 180
catatgtttc cagacactga gtatcttgaa gtcttctgct taagttgaaa ccaagttaag 240
aaacgtcttt aagttttcct attcttgatt gttcttatta gccctacaag ctgttttagaa 300
attaagagaa gcttagcttg agggaaaagc attctgatgc gacggttctg aagccttggc 360
gaaggaaaga catcgccttc cccttacaag acactaccta aatgcaacag aact 414

<210> 3881
 <211> 428
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-010-Q1-E1-D1

 <400> 3881

 ggtcaagaat taccgggtcg agccacgcgt ccgcaaactt cagagtatag agaactcggg 60
 gaaagtggta ttttagtcag tcctcttggg tttggggcct cccattagg tggagtgttt 120
 ggtcctgtga gtgaagaaga aggtattaga gctgtacata aggcgtggaa agagggcatc 180
 aacttttttg actgttcgcc ctattacggc tttacaaaag cagagaaagt attgggtctg 240
 ggtttgaagg accttcccag agagtccata gtggttgcta cgaaagtagg aagatatgga 300
 ccttcagaat ttgacttttc agcaagcaga atcgagcgca gtgtgaaaga gagcatggaa 360
 cggttgaacg ttagctattt agacgtcggt cagtgccacg acattgagtt tggcgatctg 420
 aatcaaat 428

<210> 3882
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-010-Q1-E1-D12

 <400> 3882

 aagatgaggt atagagaatg gcggtcctaa ctgtaaggat ccaaaggtag cgaagtaa 60
 agacgtttga aaggcgtcca gtatgaaagg agaaacgagt gtagcactgt ctagtcgtcc 120
 aactcagcga aacagcaata actgtgaaaa tgcagtaaac tagcagtagg acggaaagac 180
 cccataattc ttgactagat aggtttaggg aggagagaga atcatgaagt agaggaggtg 240
 gggtaagaga tgaaagacca ctgcatgagg ataaggaatc taactgagta aggaaaataa 300
 gcttaagcta gtttggctgg ggaagtaaag cctaagaaag agtaaattag gcaagcaaag 360
 gcatgagaga agtataatag cagaagcatg cttgaagaaa aagaaagaga 410

<210> 3883
 <211> 409
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D2

<400> 3883

gggccgaccc acgcgtccag gttgtttgac cattggacaa tccattatct ttgtgcacac 60
acgcgcaagt gccaacgaat tgaccaagag acttcgagag gaaggccata ctgtatcttt 120
gttacacgga ggagatatgt cacctgaaga acgggatcgc gtgattgacg agtttcgacg 180
tggaactacg aaagtattgg taacgaccaa tgtattggca cggggagtag atgtattaca 240
agttaccgta gttgtcaatt atgatttgcc actagatgtg aacaatcaac ctgatccaga 300
gacttactta catcgagtag gaagaactgg aagatttggg agaaagggtc ttgctatcaa 360
ttttgtgtat gatcgatata gtttgaagca gttgcaggac attgaaaaa 409

<210> 3884

<211> 281

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D4

<400> 3884

cacgcgtcca cccaagcgtc cgggtgggtat tgcgactcat ggccatgctg ttggtaatgt 60
gtgtctatag aagaagtcta ttgtgggaaa ttcgaggaat gcttttttaa aaaaaaaga 120
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaa aaaaaaaaaa aggggggccc cccaaaagga tcaaaactta cgtacacgtg 240
aaagcaaagt caaaaccctt caaaagtgtc accaaaatta a 281

<210> 3885

<211> 402

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D5

<400> 3885

ttcccggggc gaccacgcg tcagcgtaca ttgtccagtt tgctttttct gttgtagtca 60
ttgctatgtt ctcccaagtt accttttatc tataccgtga ctttaagtgt gctttcgatg 120
ggcattggga ttacgccacg catagcgaag tgtctgggtc tgtgggttat tgccgttact 180

tcattgcttt ggggagcatt tccatcgtag ttttagctat tggtgccgta gctacttttg 240
gaacgctgta ttttgaagtt cctatggact atatctttta tggtgaatgg gggatcaacg 300
cttttctggt tctgtggtgg attatcggtg cttctctcat tactgctaaa agaccttcgg 360
atgagttgat gcaaatgttg aacaacttgc gtgaagttgt tg 402

<210> 3886
<211> 389
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-010-Q1-E1-D6
<400> 3886

ggtactagtc tagaattccc gggccgaccc acgcgtcagg gacgttattt tggtgttgg 60
aggaaataaa accgaccaa ccgaacgtag acaagtaagt acggaagaag gagaagccaa 120
ggcaaaggaa tatggaatta tgtttatgga aacgagtgc aaagctggtt tcaacgtcaa 180
agcattgttt cgaaagattg cttctgtatt gccaggaatg gaaaacgtac cagagcctac 240
aaatatgcaa atggtggata tcaaactcaa ctccaacaca gaaacgacga cgactagcga 300
gtcgaatcag acgcaacgat gtcgttgta gagcgagatt ggatggtgta caagtaaaag 360
ttttcagagt cttggttttc cacggaatg 389

<210> 3887
<211> 406
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-010-Q1-E1-D7
<400> 3887

ggtaccagtc tagaattccc gggccgaccc acgcgtcagc agaaatacaa gaagaaagcc 60
tatagaggcg acaagaccat gacgcaaact ttttgaaat cgctgcacaa cagcaacgat 120
aaaggcggaa gacaaacaag gcgcaacaac tacaagagct attcctacta ttaggggttaa 180
tgtcatagtg tcgcgataac ctcgaatgg ttcagaagga aactgatcaa taatatttgc 240
caagtacggg tttaaacttg cagctggtgc cagtgtgaagg ggaagattgg taaagagtcc 300
gattaggata gagccagctg ctctgtgat agctgtcgca actgctactt caaaactcgg 360

tacggaagct tttgtggaga ataattgaga gttgagaagt taaaca

406

<210> 3888
<211> 223
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-D9

<400> 3888

accacgcgtc cgccacgcg tccggaaggt ttcggttatt ggaacgactg attcgtcagc 60
tgaggagtac tatggacaca ttatctgaac tttccgattc caacaaggaa aagaaatgga 120
gcttacatga ttatgttatt tgagaagata tatgttttgt aaacgaacaa gaagctcttt 180
ctacttgtaa atatcgagtt attcgatgaa tatttttgaa aaa 223

<210> 3889
<211> 385
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-E4

<400> 3889

gacccacgcg tccaccacg cgtccgcca cgcggtccgcg gacgcgtggg cggacgcgtg 60
ggcacttggt gaggtagtta agcacaattt ggggtgttgt ttcaagcttg tcttaaacc 120
gtgggagtaa aaacgacgaa attgaagcaa gctagaacct ttaccataca atggaatcaa 180
ctcagtgaat gcaagcacia gaatatgcga agattactct gttttacttg ccttggtcag 240
tcacgttat cgcacaacta tgggtatttt gagcaaggta cgatgcagag cctcgtggaa 300
atttgtttaa aatcaaata cgtgtagaac acaattattt tcagcaagtg ccgaccaagt 360
ggaaggaatt gggaaaggat gttca 385

<210> 3890
<211> 281
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-E8

<400> 3890

ggtacaggtc cagaattccc gggccgaccc acgcgtcagc ccacgcgtcc gcccacgcgt 60
 ccgcccacgc gtccgcccac gcgtccgccc acgcgtcagg agatgtattg cagtaactac 120
 aagtttatcg gcagatcatt tccaatcggg gagtcctgat gtgatcaaag aacatccggg 180
 agtcattacg attgccgata ttttgggggt tgagaattta cagggatctt gtaatgacga 240
 cgacgacgag gacgaaaaac aacaataaat gggttgcggg t 281

<210> 3891
 <211> 394
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-010-Q1-E1-F4
 <400> 3891

cgggccgacc cacgcgtcca cggacgcgtg ggaagaagac gagtcaatgg aaagcaaatac 60
 ggtggaccaa aaaggcaatg caatggaaca agtagaaatg gaggatactc atcaagtttc 120
 agacactggt gttgctcatg gagaggcgtc ggataccag ttgghaatgg gacgatcaac 180
 tctacccgaa aaacaacaac aacaactacc accgccaatc gaggaacaag aaacgcgaaa 240
 taatctaggc gaacagtcag agtcaactag ttgcatcggg gagagcacag aaagctgtaa 300
 tatagcacca aaagctgaca ctataagcct cccaaacctc cgtagcgatg caacttttat 360
 taagaacatc gtcagaaat tgtgcactgt taat 394

<210> 3892
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-010-Q1-E1-F7
 <400> 3892

ggtaccagtc tagaattccc gggccgaccc acgcgtcac attatgtatt attcgagtgt 60
 tatctttaca caaacgggag tctctacaaa agatgctata ttggcaagtc ttgggtgcagg 120
 aatattaaac tttttatttg ctcttcagc cattccaacg atcgaccgat ggggcagacg 180
 tcctttgttg ctatggacat tcccactcat gagcatcttt ttattatttt ctggcttttc 240

cttttgggct tcgtctagtc atactcgttt gggattgggt gctgctggta tttatctggt 300
 tatgattggt tattctccag gagaaggacc tgttccattt acttattcta gtgaagtatt 360
 tcccccttat attcgactt gggaatgag ctnttgcacc gcaacta 407

<210> 3893
 <211> 304
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-G11

<400> 3893

aagaggcaaa tacgggaaag cagtaaaaga agaaagagaa aggaaaaaac tgagtatcag 60
 gaagaaaaga gggagtagat gaggaaagaa agatcaagga agtaagagta agagaaggag 120
 taatgtgaat gaaagcagga aagtatttga agaagagagt gtaaagcgcg taccttttgc 180
 ataatgtccc agcgagtgaag agaggaagca aaatataaaa aaaaaaaaaa aaaaaaaga 240
 aaaaaataa aaaaaaaaaac gaaaaaaaaa aaacaaaaat aaaaaaaaaac aaaaaaaaaa 300
 caac 304

<210> 3894
 <211> 289
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-G2

<400> 3894

aagcaagaaa gtatttgaag aatagagtgt aaaacgcgta acttttgcac aatgtctcaa 60
 ccaattaaag aaggagccaa agaaagaaa aagaagtatc caagtaagac cccaaactaa 120
 ttgatcctaa gctgttcaaa ccaagttaag gtgaaccaat aactgtggaa aaagattttg 180
 gaaaaattgc ataaaggggtg aaaggccaat caaaactaat tataactggt actcctccaa 240
 agctaaataa ctaacgtatg caagaaagaa gaaagtaaaa gaatagaaa 289

<210> 3895
 <211> 374
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-G4

<400> 3895

gggccgaccc acgcgtccac ccaagcgctc gcggacgcgt gggttgtcaa ggaaaaaatt 60
acttgaaacc cggagaaaaa caattgggga ctgggaacaa tccaaaacat ttggaaaacc 120
ccgttaaatt ggccaattaa aattggaatt gcattcccaa accaattggc atttaaggga 180
ggtcctaagg gggccaagct acattgggcg gggccctatt tactccagaa ctttattctt 240
gtggagtaga tattgttggc ccttccaact tgaaaacatt attagatagt gttcctgatt 300
attggaagcc gatgaagaaa gaattactgt tgagaattgg tcccgtagac accgacgaag 360
aattcaatca aaag 374

<210> 3896

<211> 326

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-G6

<400> 3896

ttcccggggc gaccacgcg tcagcagttt actgcaatgt ttcgacgcaa agcttttctt 60
cattggtata caggagaagg aatggacgag atggagttaa cagaagcaga aagcaatatg 120
aacgatttgg tttcagaata tcaacaatac caagaggcta ctgctgaaga cgggcttgac 180
gtggattttg aagaagaagc gttttaagct ttgtgtcaat acacacaatt ccttgatat 240
cgcctcgacc tttcatttgc aaactattca gaataccgtg actatttctc cgcaattcag 300
tgatggataa agaaagatgt ttttag 326

<210> 3897

<211> 400

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-010-Q1-E1-H10

<400> 3897

attcacgggt cgacgcacgc gtccgggatt gaccaagtgt gagaagcaaa gtcaatggaa 60
aaggaagagg aaaggcgaaa aaagtagcga ataaatctag agtagaaagc tgtgagagga 120

aagaggtgta tgatgcaggc aaagaagtga cgcagtagat cagagagtaa cacatgcaag 180
taggtaaagc gaacgggtga gtaaagaggt gtgaaagagt ggaagaacat gaaagcacag 240
aagaaagatc aaggaagtaa gagtaagaga aggagtaatg tgaatgaaag caggaaagta 300
tttgaagaag agagtgtaaa gcgcgtacct tttgcataat gtcccagcga gtgaaagagg 360
aagcaaaaag aaagaaaaag aagtagccag gtaagacccg 400

<210> 3898
<211> 449
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-010-Q1-E1-H5
<400> 3898

gtacaggtct agaattcccg ggccgaccca cgcgtccacc cacgcgtccg caaccgtttt 60
tcgcagctcc aaccagcagc atcagtcagc ctacagtcgt tttcaacggg ccacttttga 120
ctgcagcacc aacttttcagt cctttttacaa ctgctgttcc tagtttcagt tcaggagctg 180
tttccagtgg attcccatca ttctctcccg ttccaaccag taccttttca agtgacgtga 240
atggaaatac tctttccaca ttttcttcgt ttccggcacc aacttcaact ataccgatac 300
aaacaactat ctttttctaa gcaggtagaa caagaagttc gatgagaatc acaacagtgt 360
ctgatataata gaaaagattg gattgtgttt gatgacacaa aatatcatcg tgcaaagtca 420
aaggacttta aaaagttgcc ttttaatttg 449

<210> 3899
<211> 429
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-011-Q1-E1-A2
<400> 3899

gtccacgcac gcgtccgaag ctcttcctta tattctttgt gcttggacaa tggttgcaaa 60
gactgctctg agttgcctct ttctctcttt ccttatcgct gccgcagttg cagccgacgt 120
agtttcagat gacagatggg gatatgctca gcaaactcaa caacagcaac agtgccaaca 180
agtatgtaaa cagtatgcat actatcagag tccagtctgc acttccgtaa ccacacagag 240

cccatactgg acccaatgct cgaagactgt gcaaacttt gtccaagcc agtgcagtac 300
 ttatacccaa tctcctacat ggacctattg cagcacctac accaccacta gcgtaccatc 360
 tcaatgcagc aaggccgtga ctacctatac tcaaactgc tgtgcttatg cccaacaaac 420
 ttcctatgc 429

<210> 3900
 <211> 360
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-011-Q1-E1-B3
 <400> 3900

gtcgaccgac gcgtccgcgg acgcatgggg gttgttgtgg ttgcgagatg gtgtacagtc 60
 gtttgtcctt gtctttaaac gtcacattta cttttcaaag taacgttgct tcaaattttg 120
 aagcaaagtt tagttgtaaa acaagaaaaa cctttatagg ggaagggttt ttacatgttg 180
 gccctctttt caaacagagg agctttcttt accaatgcaa gcagattcca cgttgtgaac 240
 ttgttgcgtc ttacaaaac gacgagagta caaagatga agaatcgta agttttcact 300
 gggctaagat tttattcct gacagtatga aaattgacaa caaatatgcc aacgtgtggt 360

<210> 3901
 <211> 163
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-011-Q1-E1-B5
 <400> 3901

tcccggtcc acccagcagc tccgaacacg cgtccgataa tgcaaata gggcggtccg 60
 ataaacgaga tggcgtagc cgtgatacac actttgcaca atatcgacca tatctaaatt 120
 cgatgtaaaa gctacattca acgactagaa tatgttcaga att 163

<210> 3902
 <211> 456
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-011-Q1-E1-B6

<400> 3902

gtcctacatt cccgggtcca cccacgcgtc cgaaccacgt tggtaaagat agacttgtct 60
caaggcagct ttaaagtact ccaagactgt gacagagatt tagaatgtga tcataatacc 120
aagtttcagt tggaacttat tcagtatggt ctcttttcac ctggtttttg gacgagagaa 180
aatgttctgc tcttctatct ggagctcgtg tcaggtgtat tcataaggga cactctccac 240
cttttctaca acaaaggtga agaacatctg tttgcgagtt taacgctggt gttggagaca 300
caagtttcac tggatgcaga cataaaagca aactgggaga aacgacactt tatcgtttgc 360
ctcaacgtca tgtctttgtg tgacgaatat caacgacagt attcaaaact atgttcaccc 420
aatgaaagc acgattcata tgccaccaat taacag 456

<210> 3903

<211> 378

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-B9

<400> 3903

cgattcggag agaaaagaac tgttatcagt gatgagagaa aatgcaacag aacgactgca 60
gctggctaga attcagggag cttacgttcc acccgccaga atgccgattt ccctgtcctt 120
gaactatcta catccgaacc cgtttggaag ggattcacga tatgaggaat ttcaaccaga 180
aaaagaaaag gtgaagtttg atcctggtaa tacaaggaga ggtggtatca tggaagccat 240
gttgggggga aaagataaaa tgagaaatgg gattaccagt agaaaagggt ctcttggtc 300
tactatgggc tccaacacga aagctattaa accgggaaaa ttacaataaa aaagtagcaa 360
ctataggatt aaaacaaa 378

<210> 3904

<211> 422

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-C1

<400> 3904

gtcgaccgac gcgtccgcac acgcatccgt cctttagtagaa aactatgaag tctttcggaa 60

ttgctattgt tttcctaagc tttgttattg catcttatgc agcagttgta tccgaaatgg 120
 catccaatga gtttcaaaga ggaggatacg ctccttctcc ttccaaggaa tgctgcatga 180
 ccacttgta atatgcagaa ctttgcccaa tttctcaacc aacttatagc caagctccat 240
 cttacattcc atctcctacc tatggccaag ctccttecta caatcaatat tcttcttcgt 300
 acggttcctc tagctatcgt ctcttaactg cagacgaaaa ccaacttggtg agcagaggag 360
 gttatgcacc aacaagccaa tgtattctag ttcctatcca atgctgcact gattgcaaac 420
 aa 422

<210> 3905
 <211> 313
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-011-Q1-E1-C12
 <400> 3905

tcgacccacg acgtccgaaa caaaatacgc cggtgtttga tgttcctctg gcctgactat 60
 ctttggcgaa taagctttga taggattttc gggtaggttt ggtataagtg attgtggctt 120
 ttttttgtgt tttgtgttgg atgtcgaata aaaaaaaaaag gagtgagaat gaacaataaa 180
 aaaaaaatat aaggaaaaaa aaaaaaaaga aaataaaaaa aaagacggga aatgaaacaa 240
 aatcctcata acaaaaaacaa gaagtaaaag aaaaaaaaca aacagtaaatt ttcgcttaaa 300
 aagtatgttg gtt 313

<210> 3906
 <211> 342
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-011-Q1-E1-C2
 <400> 3906

tattactgtc gtgggtttgga tatttgctat gggtattgtt tgtgggtgcct ttgcaggttt 60
 gaggangaaa agttgttttc cgaataggag gcgtcgcgtt tctcgcgagg cgctgcnac 120
 agaacatgga gttgcttcgg caaacgataa ctatagttcg cctccttttg tatttatgta 180

taatgtctac ctgccacgtc ttgatacaat agcgctgaa atagtgtacg gaagccaaga 240
atcctttctg aaacaagaac gacagttgaa aaaacgcttt gtgaagcctt acatgtccca 300
gccggtattc aaacaagacg aagaagagga tagtttgtcc ct 342

<210> 3907
<211> 342
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-011-Q1-E1-C5
<400> 3907

gacgactggc gatgaaaacg acttggagac cgacatgggc acttatccat cgactttatg 60
taaaaaccac aagtagaatt gttcatcaac caaaactggg ttttcaaaca agcccttttc 120
aaacgtccct ttttgtcctt tcgtctgctg aacaagaaca aggcgggtcc tcgaaaagtc 180
gccagtctca tgcttttgcc tcctttgcta ccgtagcagc cactgtattt ggtaccattt 240
atatgacgtg tcccattttg aaagcagacg atgagactct agagcctcca aaataccctt 300
ggaaccattc tggtcctttg tcttccttgc atgccgctgc ca 342

<210> 3908
<211> 256
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-011-Q1-E1-C7
<400> 3908

ccgggtccac ccacgacgtc cgagaactcg agtccttggt gaaagaacga gatgctattt 60
tgaatggaac aagtgaagaa tacttgagtc aattggcgcc tttagagaat gaaaggaaac 120
gtaaactcga tagagctatg gacttttatc aacttcaact acaatatgca gaacagctgt 180
atgagttggc caagaaagaa gcatatgata gctttcaagc acacaaggca gatcattgag 240
aacatatgtg gcgtat 256

<210> 3909
<211> 423
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-D1

<400> 3909

gtccacccac gcgtccgaac caaagcgccg gtggcatttg ctgaaactt tactaagaaa 60
caacttatga gcgacagtgc ttccattgga gaaacaaaga gtgtagccac ttgtttttca 120
ttgggtttta aaactgttcg aaggcctcgc gcgagagata gtgacgattg cactgtttcg 180
gaaggagagc aaccgaaaaa gaggaatgc gtcgagttgt cgagctattc aagtgatctt 240
ggctctcaatc ataagaaact ggataaagcg aacaacttct acaagctaag gcaatctatg 300
gatcatttct cgttttccga cgaaaacca gaggaagcga tggaagttcc ggcgtctcct 360
gatagaacac cggaaggca aattttttcc aacagagttt aaaaaacagt tccccctacc 420
cct 423

<210> 3910

<211> 395

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-D10

<400> 3910

tccgggtcga cccacgacgt ccgaaagctt atgagaatgc cttggctttg gcacttgctg 60
gtgaattgga gtcttctgga gttgtggttc aaagcataac tcctttcttc attacgagtg 120
aaatgagcaa gatacgcaaa tccagtttgg cagttccttc agctgagcga ttgctcgag 180
atagtttaaa gagtgttggga tatgaagtgt cttgcaatcc ttattggttt catgaattcc 240
ttgcactagt tatttcctat ttaccttga aactacagat tcgctatgta gccaaagtac 300
atcgtggcct tcgtgaaaaa ggattgcgaa agatgtcttc tgcagaatag aagagtagaa 360
tatgatgtgg tgattagtct ttggagaaat tttgt 395

<210> 3911

<211> 379

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-D12

<400> 3911

tcgacccacg acgtccggaa tgaagggaag ttatggcaaa aacacgtgcc agcagcagcg 60
 gtaaaacgtg tgtagcaagc gtagagcaga agaactgggt gtaaaggctc agtagtagag 120
 taagtgtaaa agggaaagga aaggagagaa agaggaaagg gatgaaatgc agagatctct 180
 agagaaaggc aagaaagaaa agaaaggaag acacattaaa tgaggcgaga aagcatagga 240
 agtgaaacgg attaggaacc cgtgtagtct atgcagtaaa agaaagaatg agtaagaaaa 300
 aagggagtca ttccaccagg ggagtaaagg cgcaagaaag aaaccaaagc aattgacggg 360
 aatcggaata aagggtgga 379

<210> 3912
 <211> 229
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-011-Q1-E1-D2
 <400> 3912

ttcacgggtc caccacgcg tccgaagaca aggaaggaat tctccagac cagcaacgtt 60
 tgatatttgc tggaaagcaa ctagaagatg gtcgtactct ttcagactat aatattcaaa 120
 aggagtctac tcttcacttg gtattgcgtt tgaggggtgg ttgctaaata tttcagcaag 180
 tagtttagtt tagcccttat tttctgaata aatattcgca gtttttgtc 229

<210> 3913
 <211> 150
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-011-Q1-E1-D9
 <400> 3913

gtgagtcgta ttaccaccag cattgggaag gaaacagttc gcggattatt gcattgggac 60
 gattgataga agctggacaa gccggtagtt aattgttcgg ggggagcagc cagagactag 120
 tagtcaaata cacggctttg aaagcgtcac 150

<210> 3914
 <211> 385
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-011-Q1-E1-E1

<400> 3914

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aacaccgact gtttagcana aacacagcac tctgcaaaaa agagaaaatg taaagtatag 120
agtgtgcggc ctgccagata gtagagaaga aatcgatgaa agtgaaagcg agtaaaagat 180
gaggtatana gaatggcggc cctaaccgta aggatccaaa ggtagcgaag taaataaacg 240
tttgaaaggc gtccagtatg aaaggagatt accgtttgtg gtgtttgtgt gtgtgttggg 300
aagagagaga tggataccgg aaaaccttaa acttctgtac gcctaaggag tacaaccgga 360
gcaaaaacca gcgaatcaaa gaaaa 385

<210> 3915
<211> 295
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-011-Q1-E1-E4

<400> 3915

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accgaatggg taaatttgaa aactcggaca aagtaaaaaa gcaatttcct gttgcagggg 120
aatgcaaggg gccgaacacg actcttcact ggaagaagaa aaatttggga ctttgacagc 180
gacgatgatg catgttccta ctgtaaaact tgtcagttgc gaagaagact ggaaaaaagg 240
ctancancga aaaagatata caaccaaact agaaacccaa cgaagaccac atacg 295

<210> 3916
<211> 143
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-E8

<400> 3916

acaacaccct atagtgagtc gtattaggag cacatacaga agagaagctt tccgaggaga 60
atthttgtctg caatagtatg aggcaagtcg tgactgacac aatagacttg cgagaaagag 120

tagagcacac atgcacagaa tgg

143

<210> 3917
<211> 346
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-F10

<400> 3917

acaaaaccct aaagtgagtc gtattaagcg ctttatgaag tgcattgtctt ttcagatcac 60
acaaccactt ctgcactgaa tgaacgacgt atgggtacta actgtgcatt ttgggggatcg 120
agcaaggatg tcaaatatgt tatcaactag gatttcccgga atactagaca acactatggt 180
catcgcatcg gtcgcactgg tcgtgctggg gcccttggca actcccatac ctttttccact 240
ccgggttaaat tccgtgtagc gaacgaatta gttaacttgt tgcgagatcc tcgacacgac 300
attcctcccc agttggctcg tttcataaaa acttcggcct ttggcg 346

<210> 3918
<211> 268
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-F9

<400> 3918

cccacgagtc caaagaagga ctaatgatga ttactcacac aaccatttgg aacaaagagg 60
caattttctgg aatacaatac cagacgaaag agacaggaaa aatctgactc tcacgaagat 120
tcgaggggaat aaatgaggaa aaagcccata caccaagaaa atgtctcatc ataaggtcag 180
aaggaattcg agatcaacat agggtaggct taaaagcatc taaacataga ggaaagcggt 240
aaagcatcac tgaacagaac tccgatcc 268

<210> 3919
<211> 231
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-011-Q1-E1-G10

<400> 3919

aacagaaaact caaggaaggt aacgtacctc acgagtttta ttattatccc aaagcaggac 60
atgcctttat gaatccaccc gatggagggt ttacggatga aatgagatcg aaagtggaaa 120
tgttgcgtcc ttatgatgaa gagagtagac aattggcggt gtccagaatg ttggaatttt 180
tccgtaaaaa cttgtcgtct taaataaagt gtgtttgggt ttttgtgaaa a 231

<210> 3920
<211> 317
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-011-Q1-E1-G9
<400> 3920

attcccgggt cgaccacac gtccggcccg agaaaggaga gggcgtaaga cgtgatacag 60
agtaggaaga aaagagaaga gagctagaaa ggaggtaaaa gaagagtaaa aggactagaa 120
gaggtagcga attcacgagg aaggagcgtg aaggaaggag gaatcccaag taatcgagga 180
agaaaaagct tcggtgaaag cgtgaacgga ttttgtacac actgcccgtc aagttctgga 240
agtgtgctag gaataagcag gagaagtaga agagagtagg aaaagaagaa aggaagtgaa 300
gacgtaagac gtgaaaa 317

<210> 3921
<211> 304
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-011-Q1-E1-H11
<400> 3921

ggttgagatt ggttttcttt tcgtccacgc ttcgttccgt tactttttgt cgtgacaagt 60
tataatataa aatggccaaa gtaaaccctg tgcgtcggc tcctaaacta agtgtaacta 120
gagagatagc tatcggtatt gggcttggt tagcgtgtgc tatggtattt cgccagtggc 180
atctcggata cacggaaatg ataagaaaat attatcgga gttggatgag caagaacaga 240
gttcctcgtc gtcgtgaaaa ccgccttggt tttgtgagat aacaataagt ggaaccttgt 300
ttcc 304

<210> 3922

<211> 401
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-012-Q1-E1-A5

 <400> 3922

 gggtcgaccc acgcatccgc acaggggaata agttgttgga taaactattg tttcctgtgg 60
 aacgggtggc atgttcgttg tttcgatgga ataaggagga gaaggaggag atgagtagtg 120
 gaaatggcaa agtgttcatg gaagagaacc atgagcctgg gaaaaccacg accagtgcgt 180
 tggcctatgt caaacaatat tctccgatga aaaagaggtc ctcttagtgt cgttgatcaa 240
 cgaaatgtgg tttcctagggt ggatagatac aaagataggt ataatatcga gcttttttat 300
 tccttgttcg gataacgatg atatcgagac cacaaaaaaa aacaccagag caaccgcctg 360
 tatecttttt gtttccccca acaacaacac tagtcgaata t 401

<210> 3923
 <211> 428
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-012-Q1-E1-A7

 <400> 3923

 gtactagtct agaattcccg ggccgaccca cgcgtcagga agagacggtg agagcaatga 60
 accacgtcat cgaccgtgga tatgcatatt attggggaac tagtgagtgg tcagctcagg 120
 aaattacaga ggcttgtcga gtcgcggatc ggaatggcct tattcgtccg ttgtgtgaac 180
 aaccacaata taatatattc catcgtcatc gagtagagat agaatacgaa cctctttata 240
 gagagtttgg tttaggtacg acgatttggt cacctttggc ctgggggtata ttatccggaa 300
 aatacagtgg gaagaatatt cccgaagggt caagattatc tctggagaag tacaagtggc 360
 tgaaagatac tgcattttca gaaagagagt ggcaaattga aaagacggat cagttaaagc 420
 caatagct 428

<210> 3924
 <211> 421
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-B10

<400> 3924

aagctcttcc ttatattctt tgtgcttgga caatggttgc aaagactgct ctgagttgcc 60
tctttctctc tttccttata gctgccgcag ttgcagccga cgtagtttca gaggagagat 120
ggggatatgc tcagcaaacc caacaacagc aacagtgcc acaagtatgt aaacagtatg 180
catactatca gagtccagtc tgcacttccg taaccacaca gagcccatac tggaccaaat 240
gctcgaagac tgtgcaaacc tttgtcccaa gccagtgcag tacttatacc caatctccta 300
catggaccta ttgcagcacc tacaccacca cttagcgtacc atctcaatgc agcaaggccg 360
tgactaccta tactcaaacc tgctgtgctt atgcccaaca aacttcctat gcagtcagta 420
c 421

<210> 3925

<211> 466

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-B11

<400> 3925

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tggttttatt gctggaacct ttacttgta ttcactccat tgtggcaata ttcttcacag 120
aacgaatagt ttctgccctt ttcgcagttc tttttccaag gttcacacac cattttgtgc 180
tagttttcgt catcaaggaa tgtgcaaggc ctcgctctcc tcaagtcctt tttctgactc 240
agcagagcca gatcacgagt tgacagcaaa tgaacatctc aacttgcat ggatgggtat 300
tttagctact tttttgggta tgttgccaga aactgccgat gcttcttcgt tggacacctt 360
gaaagatatt ttcaagagca agccggcttc tctgctacat cctctgggta tgttgggagt 420
tttaggaact tctttgtata ctttccattt gggttatcag tcgagg 466

<210> 3926

<211> 317

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-B4

<400> 3926

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gtctttacgt gaaggtttga tatacaagat gtaaataata tctttgtgtg atatcaaacc 120

gcgaataagg accgagatca aaaatcgcg c ttgacgatac gggggagtgc atcaagtaaa 180

agtctctcat ctcagacttc gcgaaacatt attaaaaagt tttccttata acaacttata 240

tcgaaataat aaacgatttt gaagaaaaaa acaaaaaaaa caaaaaacaa aaaaaaaca 300

caagacaaaa agaacac 317

<210> 3927

<211> 331

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-B5

<400> 3927

ccacgcatcc gcagacgctt gggccagcaa ggaaataaag cgtttataca agcgcttcca 60

gaaactagat agaaacagct cgggaactat tgagagtga gaactttata tgattccaga 120

acttgcaatg aatcccttgg ttctcgcac tgtttctttg tttgacggag ttaattttcg 180

tcagtttggt tccttggtga gtgtgtttag tgcaactgca ccgaagaacg agaagattga 240

ctttgctttt cgtatatacg atgtggacaa cgatggagtt atttccctca acgacctggt 300

tgacttggtta cgaatgatgg tcggttaataa c 331

<210> 3928

<211> 411

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-B7

<400> 3928

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ggggaaaatt gggcaatgta cagggaagta tgaccagta atgaggagt gagtaaacag 120

aaaaggaagt aaaaggagg aatgaaggga agttatggca aaaacacgt ccagcagcag 180

cggtaaaacg tgtgtagcaa gcgtagagca gaagaactgg gtgtaaaggt cgagtagtag 240

agtaagtgtataaaagggaaag gaaaggagag aaagaggaaa gggatgaaat gcagagatct 300
ctagagaaag gcaagaaaga aaagaaagga agacacagta aatgaggcga gaaagcatag 360
gaagtgaaac ggattaagaa cccgtgtagt ctatgcagta aaagaaagaa t 411

<210> 3929
<211> 432
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-012-Q1-E1-B9
<400> 3929

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acagagtgtt taagtattcc aactatcggg ataggagctg gaaaatatac ttcaggacaa 120
gttttagtat atcacgatat gattggaatg ttacaacatc cacatcatgc caaagttact 180
ccaaagtttt gcaagaaata tgctcaagta ggagaagcta tacaagaagc attggaaaac 240
tatcgtgatg aagtgatgca aggaaaattt cctaataaaa catatagtcc ttatcatatt 300
tcagaagaag aatatgaaaa gtttgtacaa gaaatgcaaa agcttcgtcc tncgtgtcc 360
tctcgtctg caaccattcc cgacaatctt cagcagaatg tgcagttgta tggagatacg 420
anatagaaaa ct 432

<210> 3930
<211> 409
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-012-Q1-E1-C12
<400> 3930

gagaatggac gataaggaac taggcaaaag gatatggtat ctgcggtaga acatatgaaa 60
gaagcagcac cgactgttta gcaaaaacac agcactctgc agaaaagaga aaatgtaaag 120
tatagagtgt gcggcctgcc aaatagtaga gaagaaatcg atgaaagtga aagcgagtaa 180
aagatgaggt atagagaatg gcggtcctaa cagtaaggat ccaaaggtag cgaagtaa 240
agacgtttga aaggcgtcca gtatgaaagg agaaacgagt gtagcactgt ctatcgtcc 300
aactcagcga aacagcaata actgtgaaaa tgcagtaaac tagcagtagg acggaagac 360

cccataattc ttgactagat aggttttagg aggagagaga atcatgaag

409

<210> 3931
<211> 447
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-C7

<400> 3931

aattcccggg ccgacccacg cgtcaaaaga gatggcataa ggggtgaaag gccggttatg 60
atcgacatat tactattttc tctccagagg gacgactata tcaagtagaa tatgccttta 120
aggctgtaaa gtcagtagga attaccaccg ttgctgtaaa ggggctggat gcagtttgtg 180
gagtaactca aaagaagggt ccagataagc tcattgacct taaatcagtc accaatgttt 240
tccgaatatc ggatcaccac ggctgtatct tctctggact tgcaacggac gcaagggcac 300
aactacaacg aacacgatcg gaagcagcag atttcaagtt taagtttggg tacgaaatcc 360
cggttgacca gatagcgaaa agattggcgg acatcaatca agtttatacc caacacgcat 420
atatgagacc tttaggagtt tcaactta 447

<210> 3932
<211> 410
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-C8

<400> 3932

gaccacgca tccatgtcaa cgtgggtcta agaaaatatt attgctttat tgttgaatag 60
acaagggtcaa taagaaacat tgtgtgttta gtgtgaaaag aattgcaact cgtgtacgaa 120
gcatttttag agataaagag agttgccccaa tgagcaatgc acagagtgtc gggtcctcgt 180
tagacgacga ctttaagatt ccagaggaca taaaagtaag tgaaaaggag aagtaaattgt 240
aaaaactata tatttcgata gtgtccttgt attgtcagc ttgtagaaag ttcttgtaaa 300
agtgagtttc tcaacttcgtt tcgttggttac ttggaaaatc gccaggggtg gaagggacac 360
ctcatctgta ggacagaact tgaccagatg gaatcctgta tgcgaaaaca 410

<210> 3933
 <211> 395
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-012-Q1-E1-D6

 <400> 3933

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 aaaaggagaa gaagagaggg taggcttaga agcagcaaac cagagaggaa agcgttaaag 120
 catgaaagaa aagaaatccg aaaaagaaga gaaaaaggta agaaagagga ccgaatcagg 180
 gtaagaggta gaggagcaag aagagaagag agaattgctgg gtggagtagc gaaacaagag 240
 aagggaagta aaaggtaaga aagaggaaaag gtttacgaga gaaggaagta gaaagaagag 300
 agtgtaaggc ggcgtcataa tagaaatccg aaaggagtag aagaaaagag agagaagaaa 360
 gaaaagaaga gaaaagccgt actgaagaac gacac 395

<210> 3934
 <211> 435
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-012-Q1-E1-D9

 <400> 3934

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 actactcctt ctactctaga gaaaagacga aatagtgact cgttattacc ttcacaagct 120
 gaaagtttaa aagatggttt caaacaagtg gaagaacaac acagacgaga tttaaaaaag 180
 ctcgaaaggc ggtataaaaag cgctgtgaaa cagctgcaac tgaagcacag ggtatgcaaa 240
 gtgttgaaag caaagaatac aggtggtgta agtaaggaag aggagaagtg acccataaag 300
 tcatgagggg gattgtggga gtgggaatgt tgcctcttca tcctttcttt ctgaggttca 360
 gaggaatgtg atggtagaag ttaacatcat tatagagaat atttgtatat aggaactacg 420
 atacagtggg tttta 435

<210> 3935
 <211> 356
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-E10

<400> 3935

gctcctacag gacttgttgt tcctgtgatc cgtaattgtc agaatttgaa ctttgcagaa 60
atcgaaaagg ctattcataa attgggtgaa caagcgagat tagggaaact aaccattcaa 120
gatatgcaag gcggtacctt tactatttcg aacggtggcg ttttcggttc tctcttatcc 180
acgcctatcc tcaatatgcc tcaaagtgca atattaggaa tgcattgcat tcagaagagg 240
cctgtagtcg tgaatgatca gattgtcatc agacctatga tgtaccttgc cttttcttat 300
gaccatcgtc tagttgacgg aagggaagcg gtaacctttt taagaagaat caaaag 356

<210> 3936

<211> 275

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-E2

<400> 3936

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aaaattagta tctagttatt caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaaag 120
gaaaagaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagaaaaa aaaaaaaaaa 240
agagaaagaa aaaaaaaaga aaaaaaagag gaaaa 275

<210> 3937

<211> 74

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-E5

<400> 3937

acaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aagaaaaaag aaga 74

<210> 3938

<211> 422

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-E8
 <400> 3938
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 agtttttctg cgaaagaaac ggcttggttct aaacagcacc ttgaaagtat tttcactaat 120
 agtgagggtta ttacagctac agaaatacga gggatccatc tacacgtata gcagtggtaa 180
 agaggggctgt ggcataaaag actacaacaa caaagcaagg gctgggtgct gctgggaatc 240
 gaacccgga cctttgtgtt tttgaaccaa aaaaaagac aatagataca gtttactgc 300
 tgctgaaaaa cgaaaaggat agacgttcag gacctttgct ccgtatacct gtcttctctc 360
 caaaaaaggg ttcagtattg aacttgaaat catacgattt catatcagaa cattaacca 420
 aa 422

<210> 3939
 <211> 187
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-F11
 <400> 3939
 aaatggcact tgcccttga agagatatct tttcttttca actagtggat gggatcctgg 60
 aaacagggtta tctggcgata ggattccaag ctaggcgtag ctaggacgtt gtatgcctag 120
 tcagtgttta gacatacgaa agggtagcat gtgacgttcc ttgaaactcc aagacaagcc 180
 tgtaaaa 187

<210> 3940
 <211> 398
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-F6
 <400> 3940
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 gctttgtcaa gcttgtctca gtaatgaaaa gcgacactcc tagttaata catggcgttt 120

taatccatat aagtatagtt caagtcattc tcactagtag tcggaacaag tagtcgatag 180
 ttttctactt gattttccag tgagaagttt gcaaaggaaa aggcaaaaga ggtaggcagt 240
 ttttaatactg ggaagtgaca catgtacaag tgagaccttt gacgaaaaca tttcactgtt 300
 tgagaaaaca acctaggtga ctgctttcca tctacccaac tttgcaacga atacttttgc 360
 ttcattgctt ccacggcaga gttacaacct tttccaac 398

<210> 3941
 <211> 455
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-F7
 <400> 3941

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 ggtttacgag agaaggaagt agaaagaaga gagtgttaagg cggcgtcata atagaaatcc 120
 gaaaggagta gaagaaaaga gagagaagaa agaaaagaag agaaaagccg tactgaagac 180
 cgacacaggt actcgaggag aaaggagacc caaattaagg tgagagaatg gacgataagg 240
 aactaggcaa aaggatatgg tatctgcgga agaactgag gaagaaagag gcaaatacgg 300
 gaaagcagta aaagaagaaa gagaaaggaa aaaactgagt atcaggaaga aaagagggag 360
 tagatgagga aagaaagatc aacgaagtaa gagtaagaga aggagtaatg ttaaatgaaa 420
 gcacggaaaag tatttgaaga agagagtgtg aagcg 455

<210> 3942
 <211> 402
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-F8
 <400> 3942

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 ttatgactat gccattttgc tttgtatttg atacgacttt taagttttca aaaattcctt 120
 atcgaaggtc ttctaccgac ctatgtaaac ccaagcaccg ttcgtctcca ttgaaacaca 180
 ataccaagc ggtcttcttc aaggagaccg aaaagacaaa gtctacagaa cctgttaatg 240

ttaccagcgc tcccaactca aactcaaagt cggtcacatt tgacggacag ttgaataagt 300
 ctgcttctaa tacatctcca cgaaccaata tatctctgga ctctgcaaag ttaaaggagt 360
 actcttcgaa gtttcccaac gatatttctt tgcgaccgg gt 402

<210> 3943
 <211> 382
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-F9
 <400> 3943

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 ttctttccgg tgttggtttt ttttgcggtt ggtactggag ttggtgtgta tgtggcacaa 120
 aactatcgcg ttccaacgt gcagtgggtg ttgcaacaaa ccacggatat tgtgaggaga 180
 atggaaagac aagcacgcaa gtctcaagag gaaaaatagt gaaagaagaa ggtttttttt 240
 ggcgccttgt ggagaagaaa caaagctatt gctggggaat gaatccatat ccaattattt 300
 atagatatat atacatatat atgtagcacg gttatttgtg gtttccaatt ctttggaat 360
 aaaaatgctg tagttggaat ag 382

<210> 3944
 <211> 361
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-012-Q1-E1-G1
 <400> 3944

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 ccgactatat caactagttt ccccttagga caaagtgaag gttgccactg ttcccacgta 120
 tctaaataca gggttgggca gcgttttgtc gcacgcaact gtcgtcagcc tcggcaagga 180
 acaatcttga taatgtcaag cacaagctct tcggacaatt ggaaacagca gatacaagaa 240
 agcatcaaga aagcgggaaga agcaacgcaa aagtatggaa aaaactcgaa agaagcagct 300
 gctgcctggg atgccgtgga agaactggat gcagaagctt ctcacagag agttaaaga 360
 a 361

<210> 3945
 <211> 390
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-G4

<400> 3945

acgcgtccag acaagttcta gatgcagcgg cctgccaaat agtagagaag aaatcgatga 60
 aagtgaagg gagtaaatga tgaggtatag agaatggcgg tcctaacggt aaggatccaa 120
 aggtagcgaa gtaaataagac gtttgaaagg cgtccagtat gaaaggagaa acgagtgtag 180
 cactgtctag tegtccaact cagcgaaaca gcaataactg tgaaaatgca gtaaactagc 240
 agtaggacgg aaagacccca taattcttga ctagataggt ttagggagga gagagaatca 300
 tgaagtagag gaggtggggg aagagatgaa agaccactgc atgaggataa ggaatctaac 360
 tgagtaagga aaataagctt aagctagttt 390

<210> 3946
 <211> 394
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-G6

<400> 3946

gccgaccac gcgtccacgg acgcgtgggc ttcaagtga ctgtctttga gagaagtggc 60
 ctatcgattg gaactttatt ttggtgtacg agagatccgt ttggaacgta ttgaggaaag 120
 cattttaaga ctcacctatc aggaaaaagt ggggcaagtg tgatgcagtt gtaactttat 180
 aacttgaata tttcaatatg aacaaaaatt agaaaaagta tacacacgtg tctgaattaa 240
 gcaattgcaa aaaagaaaat caatacaatc gctttttcca cgcttcccaa gtctcgtagt 300
 caagacttag aatgagttga ttatcttcaa acgaaagttg cgatgtggta ctggaagtat 360
 ccgttcgaaa tggagcagaa gatgtgcttt cttt 394

<210> 3947
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-G8

<400> 3947

gtcgaccac gcagtccacc cacgcgtccg gtgggcctcc cagacggaag tgtttccact 60
ttgcaagtgg aacaagacgc tacagtagac caattaaaag aaaagatata ccaagaaaag 120
aagttgggcc ccaaaacaaa acggattcgt cttatttatt cgggaaaatt attgagcgaa 180
ggaacttcaa agttagtaga ttgcaaagta gaagatggct cctatgtgca ctgtgttata 240
tcagatgaag ttgcatctgg tcgtacgaac cacactcagg aaagaagcga acgtttacag 300
actcgattc ccgtggctga tccccagtca gagtatcgag gtttggaccg tctccgtgaa 360
gcaggtttgt acgaggaaga gataactgtt cttcgacgac aattt 405

<210> 3948

<211> 350

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-012-Q1-E1-H1

<400> 3948

cccacgcgtc cggaagaaag aggcaaatac gggaaagcag taaaagaaga aagagaaagg 60
aaaaaactga gtatcaggaa gaaaagaggg agtagatgag gaaagaaaga tcaaggaagt 120
aagagtaaga gaaggagtaa tgtgaatgaa agcaggaaag tatttgaaga agagagtgta 180
aagcgcgtac cttttgcata atgtcccagc gagtgaagaa ggaagcaaaa agaaagaaaa 240
agaagtagcc agtaagacc cgaagctagt tgatcttatg ctgtccaagc gaagtaaggc 300
tgaaccagta tctgtggaaa aagatttgga agagatggca taanggggtga 350

<210> 3949

<211> 414

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-012-Q1-E1-H11

<400> 3949

accacgcgtc cgaagcttat tgtgccactt atcttctgc ttatgatata ttaattgaat 60

gttacgaaga tgtggaaagt ggaaatgaga taaggtcggt tttacaagct tgtaagcgtc 120
accacaaaat acctatgggc aagattgata caaccgaat gtggcaagtt ggcaagcaag 180
tcagaaaaac aagagaggaa tccagtattc ccatcgttcc tttttctgca ggtgtataca 240
ttgcagctat gatggctcag attgacattt tgatggaaaa gggacatccg gtttcggaaa 300
ttgtcaacga atccgtcata gaatctgtag actctctcaa tccatatatg catgccagag 360
gtgtttctta tatgggtgat aattgttcta ctactgcaag acttggtgcg agaa 414

<210> 3950
<211> 331
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-012-Q1-E1-H2
<400> 3950

cacgcgtcca agcaaaatac gccatgttgg tgtacaaaga cgcttttaca ggtgatgaag 60
tatgttccga cgccatgaaa aacctccatg aagaggaaaa cggtttgctg ,ttggtatgtg 120
actcgtacaa catttccaaa ggaggggaag attatgggat agaagtaaac aacgatgaag 180
atgaagaagg aggaggagga ggatcagata atgcggtgga acaagtgaat attgtggtcg 240
agtcgtttgg tttacaacct tttcccatca gcaaaaagga ctttcaagta actatcaagc 300
gctatagcaa acgagtcaag gactatttgg a 331

<210> 3951
<211> 396
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-012-Q1-E1-H4
<400> 3951

gggtcggccc acgcgtccag cgatggatcg aggtcagttt gtgatggatg gaggcccttt 60
aggcaatgat gggcgttggt atcctttgct cttatcgagt ttggcacaaa tggcctctcc 120
acctcttttc gagactcgcg aagcttttct tttgaaaagt gttgtaaaga atggacgatt 180
gattttgggt cgttttgaaa accaagttca tgcaagtgtg gatcctgcat gcagtgatta 240
tggttattac catcatattt taagtagccg aggatgttcg agggcttgga agggatacat 300

tgtatctact agtaatgaaa caacagcaac aacaacaaca acctcctcca agaatcaaga 360
gcgatattct gtagaatatg cgttatcgga tggaaa 396

<210> 3952
<211> 192
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-A1

<400> 3952

ctgcagcacg gtccggcatc cgggtcgagc cacgcgtccg ccacgagtcc gtaaaagcat 60
tagctgtggg agcggatgcc gtttgtattg gacgagcaat attacggggc ctgcatatgt 120
tggagttctg ggagtaaaga aagttttggc aatattaaag cgggaattga gagatggaat 180
gaaactttgt gg 192

<210> 3953
<211> 481
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-A12

<400> 3953

cggctctagaa ttcacgggcc gacgcacgcg tcaggtggac ttgtcgatcc gccagaaaact 60
tgacaaggct attgttttca ccaagacatt atacaagggt ttatgtgaca gaacctcaga 120
cgtgcaaaga gactattcgt ataacttttg tattgcaaga cggaacaaaa aagcaagttg 180
aagcacctat aggaaagcat attctggagt tggcccacga aaacgatatc gacttggaag 240
gtgcttgtga aggttcgttg gcgtgttcta cttgtcacgt atacttggac gaacagtcct 300
acaacaagtt acctgagcct tcggacgacg aaaacgatat gttggacttg gcttttggac 360
tgacagaata ttctaggctt ggttgtcagg tagttgctag tccagaattg gatggtatgg 420
tgattacctt gcctcctgct acaagaaata tgatggtaga tgggcacgta tccaaacatt 480
a 481

<210> 3954
<211> 486
<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-013-Q1-E1-A7

<400> 3954

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tgcgtaaag agctttctga gggtcagggt ttaggagggtc ttttaagtttt tttcgcgtcc 120
ttttgaatcc taagtttata gtggaaacta atcctgtcga ggcggagtcg acaatgacaa 180
taggaaaacg aaatttgacg tgggtttatc gccttttagca gaagaagggt agctgcaagt 240
tagcccgagt gttgcattga ttggagttaa tctgttatat gcgcagcaga aaccgctaata 300
actgtgctcg tggaaaaaac attccaacga ttgctgctgg cttcttgatt ttgaataatc 360
aacactgagc gaatangcct aanaaggagc aagcaaataa ctgctacgat gagctgagaa 420
cagcttaaga tcacgtctat tgcgttcaag cgttgctata gtctcaaccc aagctcaaca 480
aaaccc 486

<210> 3955

<211> 488

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-013-Q1-E1-A8

<400> 3955

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tattagtaat ggttgacgat gcgactcggg gctcgtagga tcacagcga taccactttt 120
tcttaggaca tcttaagaga tattcacctg cttacgattc ggtgcatcat cttcgttcta 180
gttgacagta tggagatggt gttggctctt taccgttggt ggacaagttg tttcgaacca 240
gttattatca gtagggatat cagtcgtttc ccagtgtgaa gcatcttgta gatgaaaagt 300
catcttgatt gtcatagatg tgctgacaat agaagttggt ggctttgaat ttgataatca 360
aactgaagc gaataggcct aaaagggagc aagcaaataa ctgctacgat gagctgagaa 420
cagcttagga tcacgtctat tgcgttcaag cgttgctata gtctcaaccc aagctcaaca 480
naacccat 488

<210> 3956
 <211> 292
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-013-Q1-E1-B10

 <400> 3956

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 ctttattaaa agaccatata acccaataaa acaccatac acacacacac accaacataa 120
 tagaatcgat agaacgaaag aggtggaaaa agtaatagac gcgagtgttt tgtccactag 180
 tagagaatat ttcctagtcc tttgttgacg acatccaaga tggattgtcc cgtgacgatg 240
 gaagttgcca caataaacgt cacacctaca aaataaaaaa tgttcaaat aa 292

<210> 3957
 <211> 461
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-013-Q1-E1-B12

 <400> 3957

 ggtaccggtc tagaattcac gggccgacgc acgcgtcagc ggacgcgtgg gcaacaaatt 60
 cagcaaataa tgtaaataat agaagagttt gaaaacgaca gaaatgaaca agaacttggt 120
 ttgaaacagt tgctgccttt gaacgaagat cgtaagtgtt ggagacaagt aggtaagtgt 180
 tcttattgag caaacggttg gacaagtaaa gccagtgttg gaagccacga gtaaagagtt 240
 gcagcaagcg atacaaaacc taaacgaaga gttaaaaaca aaggaatcgg agtttcttga 300
 actgaaagaa aagtacaaaa ttcgggaagt ggactcgtcc tctatggctt cggcaccttc 360
 ttcttcccaa gcaacaaaac cataagtcgt tgaaactcag ccgttattgt caagcactgg 420
 cataaattgg tttccataga ttgccactgt gagagtattt c 461

<210> 3958
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-013-Q1-E1-C11

<400> 3958
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 gcctcctttt atgattctta ttttggttta cttgaatgat ggtacaatta tgaccatctc 120
 caaggacaga gtcaaaccat cacctcatcc agatcgttgg aacttgggtg aagtgtttat 180
 tcttgcaacg gcacttggct ggtggctcac tgcagcaact ctcatttact ttacaacttt 240
 gtacaagaca tctttctgga cagatacttt tcctctgtac gcagattgga agaatcccaa 300
 gttgctcgct ataaggctc catacttcac ttatggctct caaaatagtt ttatgctaaa 360
 gtctctcatc tatctgcaag tatctatgat tggacaagct cttatcttct gtacccgtgc 420
 atactggatg t 431

<210> 3959
 <211> 486
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-C12

<400> 3959
 ggtgccggtc tagaattacc gggccgacgc acgcgtcagc ggacgcgtgg gcaagccaaa 60
 gtcaaacgag ggaataggaa ttgtgagtgg atgttgaaat atacagaagc tttatgtgcc 120
 atcgcctatt tcgtacatgg aaagccttac cctcatgagc acttgcaaca actgtggaaa 180
 ctggtattac tcaatcaatt ccatgatact ttaccaggaa gtagtatccg tcaagtatat 240
 caagatgcaa gtagacacca caccaagggtg tgcagagaat tggaagatat aatgaaggaa 300
 acattccaac tgtttgtgga aaaacatgcc acgacgaacc aacaaggcgt caagtgcagt 360
 tggatatcgg aagactctag tacgagtgcg gctagtctcc attcttctta tcaacttgtg 420
 atatgcaatg atccatttcc agatgagcag atatcctatc agacaacttt tgatggcaaa 480
 tatatg 486

<210> 3960
 <211> 317
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-C5

<400> 3960

cggggtcggcc cacgcgtcag cggaagcgtg ggtgcgttgt gatcgagatg tcaacggagc 60

tcgcaatata ttgttgcgct ttttgagcaa ataatggaa attattttta aaaaaaaaaa 120

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggagaa aaagaaaaag 180

aatcaaaaca tatgttaaga ataatgtaa tttaaaaccc attcgaatag atcaccaaaa 240

ttaaattaaa gggaggtcga taaaaaaggt acttaagagg aaaaacactg ctctaagaca 300

atttaaacc attgtaa 317

<210> 3961

<211> 318

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-013-Q1-E1-C6

<400> 3961

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agagctaggc aaacaagctt ttcgacgata cgaaattctt ttacgagctt cctctgtaat 120

cttactactt cagctgacaa aactgccatg ataaagccag aaagacaaag gaagcctcna 180

caaaccatat cagttcccaa aagggtgctaa gacctctga ccaaacagca taaatcaggt 240

gttaaagtta atcataaccc cttcaatgca gggtctcaaa agcgaacatt gaacctttaa 300

aattcgccaa agaccaag 318

<210> 3962

<211> 475

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-C7

<400> 3962

ccgggtcggc ccacgcgtcc gcggaagcgt gggttcaagc aaactacttg ctgttaccaa 60

ccaattgcgc aattcttgtt tctgaaacag caaaaattct tgttatacgt ctacttttta 120

tttagatgtc accaacgtgc aactagcctg gtgaatagaa caagtgccca gtcaatctta 180

tcactctggt ggcaaataca gaaggtctgg acgagtcacc atcttctcag aattttttga 240

agcatctttc ctttggagag aatatcgtct cgagttttgt gtgtagaaag agcgtttcaa 300
 ctcagaacaa ctctccctcg agagttgtga cgccacaacg gacgataagc ttgtctaata 360
 cagactaggg ctttttgaaa aattcgacca gtttgtttca aaatgtcttt tcgtgagctc 420
 ttttttcaag tctatgtgga agagaaacag gcaacactat atttcaaaga tgacc 475

<210> 3963
 <211> 406
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-C8
 <400> 3963

cgggctgacc acgcgtccgc ccaagcgtcc gagatattat cgtctgctct tctgtctatt 60
 ctgttgctta atcattttac ttattgctat tctcgttccc attggagtgg cagtcattcg 120
 tccaaataat ggaggataat caatatatgc gtgcgtgtgt ttttctgttg ttgtaaatgg 180
 aaatatttcc tatcgatatc aaaggaatct tgtgaaatag aaacagagaa taggggaagt 240
 cgtcacaagg accattcgta gtaatttgaa taaatgttgt ggtactcaaa tgtaaaaaaa 300
 aaaaaaaaaa aaaaaagaaa aaaaaaaaaa aaaaaaaga caaaaaacat aaaaaaaaaa 360
 aaacaaaggc ataggggaaa aactcaacga atttgttcca aaatgt 406

<210> 3964
 <211> 439
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-C9
 <400> 3964

ccggtctaga attaccgggc cgacgcacgc gtccgatttt actgtttcgt ttacttgtct 60
 ttttgttgag ttatcatggc acgaacaaaa caaacagcac gcaagtctac cggtggtaag 120
 gcacctcgaa agcagttggc aaccaaggca gcaagaaaat ccgcacccgt aactggagga 180
 gtgaagaagc cccatcgtaa ccgtcccgtt actgtcgccc tgagagaaat tcgcaagtac 240
 cagaagagca ctgaacttct tatccgaaag ttgcctttcc aaagggttgt tcgtgaaatt 300
 gctcaagact ttaagacgga cctacgtttc caaacttcgg cggtgactgc ctttcaagaa 360

gcctcggaag catacttggc cggtttgttt gaagaatata atctttgcgc aattcatgcc 420
aagcgtgtaa ctatcatgc 439

<210> 3965
<211> 282
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-D12

<400> 3965

gccgaggcac gcgtcagccc acacgtccgg tacattcaac atcatcaaat gccaaaggga 60
ggaaagaaag attcttcaaa gaaagaagcc acaagtaaac ctgcagcagc agatgctaca 120
aagacgacag aaaagtctgg tccggaagcc aagttgaagg gaactggtgc aaagaaacaa 180
taaaaagttg actatgcatg ttcctgttat gttttgtgag ttctgtttga tagtttccag 240
ctattctttt ggtagtgaat aaagagaaaa ttttttatat tt 282

<210> 3966
<211> 461
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-D2

<400> 3966

cacgcgtccg cccacacgtc cgaggtccta acggtaagga tccaaaggta gcgaagtaaa 60
tagacgtttg aaaggcgtcc agtatgaaag gagaaacgag tgtagcactg tctagtcgtc 120
caactcagcg aaacagcaat aactgtgaaa atgcagtaaa ctagcagtag gacggaaaga 180
ccccataatt cttgactaga taggttttagg gaggagagag aatcatgaag tagaggaggt 240
ggggtaaagag atgaaagacc actgcatgag gataaggaat ctaactgagt aaggaaaata 300
agcttaagct agtttggttg gggaagtaaa gcctaagaaa gagtaaatta ggcaagcaaa 360
ggcatgagag aagtataata gcagaagcat gcttgaagaa aaagaaagag atttcagaaa 420
gggaagaaaa gtcagctata gagaacatgt taaggagaac t 461

<210> 3967
<211> 470

<212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-013-Q1-E1-D3

 <400> 3967

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 tgaaatgatt caaataagga ctgtgttaaa agtactagac aactcaggac caaaaacagc 120
 aagatgtata ggaattcttg gaccacctaa aaagtttgcg actgtcgggtg acaagattgt 180
 agttactgca gagggaaaag ttaccacgg aatcgtcgcc tgttgtaagg tggaaaagaa 240
 gagaccggac ggttcctttg taagaatcga ccagaacgga gtcattctag tagattcaag 300
 tggaaagcca gtgggaaaca gagtatttgg tgttttgagc agtagagtga agcaaccgga 360
 aattctctcc ttgggacgcg tcaaaacat gtaagcttta atagttaggt gtagaaacta 420
 gtaaaaactt ggcttgtaac caacgacgag tcatcgtttt gtcatcgttt 470

<210> 3968
 <211> 473
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-013-Q1-E1-D5

 <400> 3968

 cggggtcggcc cacgcgtccg cccaaacgtc cgcccacgcg tccgcccacg cgtcgcgcca 60
 cgcggtccgcc cacgcgtccg cgcaaaggca gttggggcgt gccatgtcga gttttcaagc 120
 gctgggactg aaggaatgga tcgttgaaac ttgcaaggca ctgaatatta agaaaccaac 180
 tccttgccag gtagcttgta ttccagaaac actaaaaggc aaggacataa tcggttcttc 240
 agaaacagga accggtaaaa ccttgtcttt tgttttgccc attgtcgacc ggctaagtgt 300
 ggacccttgc ggtatttttg ctctcgtgtt aacgccaaca agagaattgg cttatcaaat 360
 atatgatcag ttcaaagcta tcggaggccc tatatccatt agagtagctg tggtgattgg 420
 tggtatggag ttgatacaac aagcaaagga attggaaaat agaccgcata ttg 473

<210> 3969
 <211> 475
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-D6

<400> 3969

acgcgtcagc ccaagcgtcc gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaggga 120
ggacgcccaa aggggttcaaa aacttaatta cacttaaata aaaaataaaa agggcggttca 180
gccctttcac ctaaattcat ttcattggcc ttcgttttaa aacttcgccc ttggaaaaac 240
cccgaattta cccaacttaa gccctttgta taaaaccccc ttttcgcaaa aagccttaat 300
ttcaaaaagg ttttcccctt tggcccttcc ccccttttcc ccaccctgaa tggcaaatgg 360
gaccccccca gttttggccc attaaacatt gtggttcttg gtggttaccc acagcgtecc 420
ccctaaattt gcaatttccc tagggcgggg tcttttcgat tccccccatt ccttt 475

<210> 3970

<211> 414

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-013-Q1-E1-D7

<400> 3970

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gctaaagtgt tttagcagct gctgaaaaag aaagattatg cttacttctt ctggagtggc 120
accatcacta taatttgtaa actatagcat tcaataagca aacgacatga acgataaacg 180
aataatatta cctccacaaa aacacttctc gcaccgggat ccttgggaagg tttctgcaac 240
atttttacta gagaatccgt taccgcactt ttatcatagt aagcttggtc tagtattcga 300
cgaataacgg tttcttttgt caactgctga aagaatattg tactaaaaaa ttggattcgt 360
aatagtcctg caataaaaaga agccaacact gctttcaatc nactacgctt cttc 414

<210> 3971

<211> 478

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-E10

<400> 3971

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cgtagtctt ttattggctc tcttatgctg acgttctgct ctggctgctg aattggcacc 120
tggaattgcg gaaaaaccgg tagagagagg atatgaggaa cctgctgta ccgaatattg 180
ttattgggaa gaaatatgta tcaacaccca caccacacc tacaccaacc tactattact 240
attattacgc aagaaatgca aaacaggaaa atgtcgagag aagcgtagaa aagagtatct 300
cttccgcaga aaaatctgat gcggttcgag ggtatttccc cacgtactac tattatgaga 360
ctctacata ttattactat tatgagactc cgacatatta ttactattat gagactccat 420
ccccaacccc gacaccaacg ccttattgta cctataccca aatgtgtaag agtatatg 478

<210> 3972

<211> 456

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-E12

<400> 3972

tgacgggtcta gaattcacgg gccgacgcac gcgtcagcgg acgcgtgggc ggacgcgtgg 60
gcggacgcgt ggggtgactgc aaagcgacct tctagtgttg ttatggatgc gttcacata 120
acgaaagata tcaattcaat cgaaggcctt tcatggatca actttgcttt tacgtattc 180
ctttgtggag tagcagcagt tgacggattg ttggtgggag ataagaccag cagctccggc 240
aaacagaata caggagcgaa caatgcttga gtttcttgag aagttacaaa tagtcgtgct 300
tatgaagttg tctgagttgc gtgagaaaag acaagtagtt gtgtctatga agttgtcgta 360
aatagttgat gtgtgttggt ttgttttgcc acagaaagga tgtttcgtcc ttggtggcgt 420
ttgcattggt caataaatga cacgatttgt gtatac 456

<210> 3973

<211> 471

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-E3

<400> 3973

cgtggcaatc agtgaataac ttctcctggt tcgtatttcg ttgaaggaga cgcattcttca 60
 gcttcctatt tccttgccggg aggcgccatt tctgggtggc ctgtaactgt agaaggttgc 120
 ggaagtgatt ccattcaagg agatattcgc tttgttcatt ttttgagaa gatgggagca 180
 acagttagtt ggacgccaca ttcgattacc gtttctcgtg caaaaggcaa ggtcttgga 240
 ggaattgatg aagactgtgt agacatacct gatgccgcga tgacttttagc agttgtagcc 300
 ttattcgctg agggacatac ttgcttgaga aatatttact cttggagggt gaaggaaacg 360
 gaccgacttg ctgcaatgtc caaagagctt atgaagttgg gagcagcagt tatggaaggt 420
 caggattata ttgttattta tcctcctgga acagttcgaa agaataaac t 471

<210> 3974
 <211> 493
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-E5
 <400> 3974

acggtccggc cattccgggt cggcccacgc gtccgcccac gcgtccgccc acgcgtccgc 60
 ccacgcgtcc gtttatgacg aaacaagata ctctcttcga taatatcatt gctgccgaat 120
 cgagactcgt gcaacttcga acgagtaacg aactatgtat tcgacgcaca cttttggact 180
 tttctcactc ttttaagcaaa gaattgggtt gtgaagtatt cctcaaactt gaatcggaac 240
 aagttactgg tacttttaaa gtacgcggcg ctttcaataa gctcaccgtt ctttctttcc 300
 aaaacgatag ccgtcaacct attgtcacag cttctacagg aaatcacggt gctgcggtgg 360
 ctcacgcagc ttccatgttg aagatacctg tttgtatatt cgttcctcga aacataaac 420
 ctaccaaggt ggataagtta tcaagttatg atgtggaact ccaatatgaa ggaacagact 480
 gtttagaggc gga 493

<210> 3975
 <211> 460
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-E7
 <400> 3975

cgggtcggcc cācgcgtcag cccacgcgtc cggtgacttg atatccacga gttctggtgc 60
 cgttggtgat tcaggcācāa cāactctcgt atttgattca aagtatttca gagacttgāa 120
 āāāatatttc cāatccaagc tatgtgacat tccāacgtg tgttccaata gttcagcatc 180
 ttctgāāact attttttcgg ggggtggagg tgettgtttt tttttctctc ctāgcgatā 240
 cgāāagttt cctactatta ccatcgagtt gtccagtttt gāāatcāact tggaacāāāā 300
 āgactatātg ttgcatgtgc ctcttagcga tattgāāagt ggāāactcga cgattccaga 360
 āāāatcāagg actagttctt cggatgccta ctgctttgca attcttgact ttccaggttt 420
 ggagtcttcc gāaggatata gcatgatttt gggagatācc 460

<210> 3976
 <211> 454
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-E8
 <400> 3976

ccgggtcgac ccacgcgtac gcccāagcgt ccgaagāgāā ggaagāagca āgāaggact 60
 ātāaggāagg āaggttcāag gāattāgāat tāāāāāāagg āttāaggtaā atgāāaccag 120
 gāāattattt gāāāāāāāā ttgtāāaccg cttacctttg gāāāāaggtc cāācāāatta 180
 āāāāaggāac cāāāaggāag gāāāgāāat tacāāagtta āāāccāāāc cāātttgttc 240
 tāaggcggtc āāācāāāātt āaggctgāac āāttāccggt ggāāāāāāat ttggāāāāāā 300
 tggaataagg ggtāāāaggc āātcāāāācc āāttgāāācc tggtaāccccc cāāāāaggāat 360
 āāāāttācct tatgcaggāā āgāāāāagggt āāaggāāāāā āaggāāgāac cācāāaggāā 420
 ctāāācāāā āāagggtgatt ātcāāāāagg āāāā 454

<210> 3977
 <211> 482
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-F11
 <400> 3977

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tagttcacga ttgatactgc tgttttgttt ggtctttata acgactataa ctttggtaaa 120
 tgcaaaacga aactattata aagtgtctggg cgtggaaaag aacgcttccg agagagaaat 180
 taagcgcgcg taccatcaac tagcaaggaa gtatcacccg gacaagaacg gcggtgacaa 240
 gaaggcggaa ctgaaatttc gagaaatagc tgaagcatat gaagtcctat cagaccaca 300
 aaaaagagaa acgtacgact tgtatggcga agaaggggtg caatatggtg ccaacagcga 360
 ctttcaagct caaggcagca attcgcgctt cacagaacaa tcttttcagg gctttccttt 420
 tggagacttt ttcatagaac acttttttgc aagcggacga aaaggaaaca gttataagac 480
 gt 482

<210> 3978
 <211> 414
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-F12
 <400> 3978

cggctctagaa ttcacgggcc gaccacgcg tcaggaagag agtaggaaaa gaagaaagct 60
 agaaaggagg taaaagaaga gtaaaaggag ggaatgaagg gaagttatgg caaagacaca 120
 tgccagcagc agcggtaaaa cgtgtgtagc aagcgtagag cagaagaact ggggtgtaaag 180
 gtcgagtagt agagtaagtg taaaagggaagg aggaaaggat agaaagagga aagggatgaa 240
 atgcagagat ctctagagaa aggcaagaaa gaaaagaaag gaagacacag taaatgatgc 300
 gagaaagcat aggaagtgaac acggattagg aaccctgtga gtctatgcag taaaagaaag 360
 aatgattaag aaaaaatgga gtcattccac caaggagta aacgcgcaag aaag 414

<210> 3979
 <211> 474
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-F5
 <400> 3979

cgggtcggcc cacgcgtccg cccaaacgtc cgacacaggc ctgttgtaaa gctttgtatc 60
 gcattctact tagaggaagt tcgctgcgag gacgtccttt acaagttttc gataatgcct 120

tgtggtcggt ttcagtgcaa gtactgttgg agttagtatt ggcagtccac ggtgtaactg 180
gagaacgaaa tggatttggg tagacgccgt ttaactggta ccatttcagt tgttgtagga 240
agaccatttc caaggaaaac atattgtgga cccggtgtgg tcttcttgag atacaagagg 300
gattactgtt ttcgaaaccg cttgaaggtc gcgttcgttt tttgaattgg agtgaaaacg 360
agtggtttcc ctggctgact ggaccaccgc tttgcggcat ccgttgacc gttcggctcc 420
acacccttg aagatgagca ctttttgtgg gaggttggag aagagccttg tttt 474

<210> 3980
<211> 475
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-013-Q1-E1-F7
<400> 3980

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gaatgggtcca acaacacctg taagaagttt ttattcgaaa gtgggacaga gcccttctgg 120
ttcggatagt gtgtatcatt ctccgtctcc aagtgtccgt acgtcgcctt cgagaaagat 180
aggcaaggtc actatttctc ctatgtcacc agaaggtcga agacagatgg cacgaaggac 240
tccaatgaca cccaaaacca aagcgttata tgcttttggg gaatctcctg gtggtcattc 300
gacacgaagc ggtaagaaac caaattacaa cgataccgga gtttcgggaa tcgacgaaaa 360
cttgcaagga gctaaaccct tatcttttaa ctgtggtgct tttggtagat ataacagttt 420
agttcctatt ctaattacat ctgatggcag gcctcctctt cctcctcaag aacga 475

<210> 3981
<211> 446
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-013-Q1-E1-F9
<400> 3981

gcgtccactc tgacactatg atgacagtgg aagagaaacc gatgtgacct acagcgatgt 60
gggaggttcc aaggagcaga ttgagaaaat tcgcgaagtt gtcgagttgc cgttgttgaa 120
tccagaaaag tttattgcgc tgggtatcga ccaccgaaa ggtgttttgt tgtacggacc 180

tcctggtacc ggcaagacgt tattggcacg agccggtgcc aatcgtagcg acgcttggtt 240
catcagagtt attggctcgg agttggtaca aaagtatgtc ggtgaaggag ctggaatggt 300
gagagaactg tttcaaattg caggttccaa gaaagcttgt attatatattt ttgacgaaat 360
cgatgccatc ggaggtgctc gttttgatga tggcgctgga ggagataatg aagtgcacac 420
tacaatgttg gaaattgtca atcaat 446

<210> 3982
<211> 481
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-013-Q1-E1-G10
<400> 3982

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cgtttacttg tctcacagac tgctggtggt tagagacttc tgcattctcc agatgtgcca 120
aagccaatac cgtctcgttg cgacgtagtt cccagtgttc acactcttgg aggagtgttt 180
cgatgaacta cagtcacctat tcgataacta ccgacaaatc agaaggacat attgttcccc 240
gtactttttc aagatttgag tttcttgaag gtgcagtcac cgggtccaacc gtcttgaacc 300
ctagcatact tgactttaca gtgtctaattg tttcagatgc tgcctttgga gaatggagag 360
cattatcggc ttcaagtaga gcaaaagaac tggaacacag aagaaacgtc accaaagcga 420
caatagaaag tctcaagaag actcctaccg aaaagtcaag ggctacattt cctggacaac 480
t 481

<210> 3983
<211> 448
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-013-Q1-E1-G11
<400> 3983

ggtctagaat tcacggggccg acgcacgcgt ccacccacgc gtccgcccac gcgtccgccc 60
acgcgtccgc ccacgcgtcc gaactcacca gaaagaaagg cgtttcaaatt atgcaagaaa 120
ctggatgtcg attacgtgtt ggtgatattt ggtggtgcgt tagggtatag ttcggatgat 180

atcaacaagt ttctatggcc tattcgaatt tctcattcgg ttgatccgac agtggatgaa 240
 agtgcttatac ttacagccga tggtaactat cgcgttgggg aaggagcggg tccagcgttg 300
 gtggagtcgt tgatgtataa gctttgttat tatagatttg gagaagttca gtttgatcgc 360
 gggcatcctg ctggttatga taagggtcga ggtgaagtta tagcgaaaaa gaacttcaaa 420
 ctgcgttatt ttgaagaaag cctttaca 448

<210> 3984
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-G12
 <400> 3984

aattcacggg ccgaggcacg cgtccgccct gctgatgtat caaattccat ttgaacaagt 60
 tcccgagcta gtgaaacatc gttcgggtcat tgttcggtcg ggttatgcct atttgttctc 120
 ggagcagttg aattcatttt tggtttcttg ctttagaagt ttcttatcga aaagtttggg 180
 agttgtacgt aagatggagc atcttgccga ggaacatgga caattgaagt tgctggtgga 240
 aagcctaaga gagagtcagc gattatatat caatcatttt tcatcctatt catttgaggc 300
 tacagaacgt gaaggaacag ggattcattt acaagatctt cctcaggcca tgttggatat 360
 gccactttgt atgtttcgtt taatgaaacg gttggagcag aatcatcatt taaaacatgg 420
 cgctcgtctt c 431

<210> 3985
 <211> 438
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-G5
 <400> 3985

gggtcggccc acgcgtccga tttgatttgg tggggacaac atttgcggtt gacgttggtt 60
 ggaatggcag aggcacaaaa ggatagacaa gaaacagaat tggataaagc ctcggagact 120
 tgtccttgtg ttaagggttg tggctactat ggaacatcgt cgaccttgaa tatgtgctct 180
 aaatgctaca gagaacacca acgtcaagag caacaaggac aaatggaatc gggttggtcca 240

caacaccagc ttcaagaaga gtcgttagac aaagcagaag accgtttgca aaatactacg 300
gaccttaaac atgtagatct ccaacaagat acgtgtgtct cagaagctat aacggggcag 360
tcggagttgc aattggaaga taccgctggg gcttcccttg aagcaaatag caggactttc 420
gtttcacctt gtcaagct 438

<210> 3986
<211> 481
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-013-Q1-E1-G7
<400> 3986

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aagatgagcc ttgcggaaga gacaaccgca gtacaaataa aagtttataa atacatctcg 120
ttgggaatga taaaaacagc tactttttata gcaagcaagc tctattatgc cactggaaaa 180
tcgtcagcag caaaactcat ctacctccat tgcttattac taagtggaga ggccaagaga 240
gcgaacagct tttttcagtt acgaaacggc gaaaacattg actcgtttaa caagctggat 300
agaatTTTTT ttcttcgtag cgtcttgtct caacaagagt ggaagcaacc atccaacagt 360
gaaaaggata gcacacttga atcctttctc gccaggaaac tcgaagaccg tggaaactca 420
agagaccagc aacagggaaa tttaatccaa gtacgtttgg gcaactttcc tccaatacaa 480
a 481

<210> 3987
<211> 466
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-013-Q1-E1-H10
<400> 3987

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ccacgataag tttggttgcg cagttaacac gagaagaaga agaagaggag acaggagata 120
aacaaggaca agatggcgac ctcgttcac atcctattgc ttacagtacg cgctttccag 180
aaaagaaaga agaaagtgg tggttattag tcggtgaatt gggagctact ccaacacttg 240

ttgctatcaa acgtctcata gtcaagggag gtggaaaaaa gaatcaagtc aagttggaat 300
 ggacggcacc gaatgaaata ggaagtcatt aatacgtttt atatctcatt tgtgattctt 360
 acttgggagt cgaccaagaa gaatccattt ccattcaagt agttgatcct ccttcttcta 420
 cggttggttt gtgagtatcg atgagcgctt gcaaaaattg ctgatg 466

<210> 3988
 <211> 473
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-H11
 <400> 3988

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 atcttttggg tccacagaca tgtcgaacga caatcagtct gataagagca ctttgaaaga 120
 agcggaggag aagctgcaga gtgcagttca tactggaaca gagaaagttt ctcaggtgtt 180
 gagcgacgtc aaggaaactg tgacggagaa atacaaggaa tggacagcgc caaaaagtag 240
 ccaagaagaa gcaaaagaaa aagcacaaga agcgaaagaa gaggctaata aagcttttaa 300
 tgctatgaaa gaaagtgcga gtgccgcttc agaggctgca tcagagaaaag cagaaaaaat 360
 taagcaggat ttgaaggagt gaagatacac agtagttttc tcctatagtg tttttagtag 420
 tatctgtagt gatatttgtc tcgtgatgaa taaaacacgg gttatcgtat ttc 473

<210> 3989
 <211> 409
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-013-Q1-E1-H12
 <400> 3989

cccacgcgtc aggaaaaagg taagaaagag gaccgaatca gggtaaaagg tacaggagca 60
 agaagagaag agagaatgct ggggtggagta ccgaaacaag agaagggaag taaaaggtaa 120
 gaaagaggaa aggtttacga cagaaggaag tagaaagaag agagtgtgta gcggcgtcat 180
 aatagaaatc cgaaaggagt agaagaaaag agagagaaga aagaaaagaa gagaaaagcc 240
 gtactgaaga ccgacacagg tactcgagga gaaaggagac ccaaattaag gtgagagaat 300

ggacgataag gaactaggca aaaggatatg gtatctgcgg tagaacatat gaaagaagca 360
gcaccgactg tttagcaaaa acacagcact ctgcagaaaa aaaattacc 409

<210> 3990
<211> 484
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-013-Q1-E1-H5

<400> 3990

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ttttgctttt catagctaata tactgccact ctatacctat ctctgaagaa gcttatagtt 120
cgagccaatc atatggaaat gctggagcgt cgggttacgc cgatgtattt ccattatcaa 180
caaataattcc agagattgaa gtagggagtg ctgcctcctc tggagacggg gggagagctc 240
attcaacaga gtttgccacg tattcgacag gctactcata tcaaactccg gagtactttc 300
ctgaatttgt gcaaccttcg tctaataga actatgaata cgctgcacct tatgggaatc 360
cggagtatta ttggaacccg gagtattatt ggaaccaga aggattatac tacccaagca 420
ctactaatga agagtgggtat aatccatcta gttgggacga atgggttcca acgactgatg 480
aggg 484

<210> 3991
<211> 451
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-A10

<400> 3991

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ctggtgcgtt tggttaatga gcgcgaacct ttcctctctg ttggtatgga caggtaactg 120
gctgtttgga ctacgtttcc gtgtaacttc tcatttcact ttagtagcca cgctgataag 180
ttgagttcgt tggctccaga actaaatcgg gtcagatcat atgttagccg ctcacctgga 240
acttcactcg aaaagatcag aacttttcgt cgtctgcgac aggaactgct gaagagaagt 300
gattcttcat ctttgaaagt gattccttat gggaagttag ctcacgtacc gctttttgta 360

accgcggcat cttcagttag aaggctaact tttcaaagat acccggtgag tgtttctcta 420
ctcatgggttg gggcacagtt gatgaatttt a 451

<210> 3992
<211> 409
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-A11

<400> 3992

ccggggccgac ccaagcgtca agaaaagaaa aaagaaatga gtggagtagt acaaggagcg 60
aagatgatgg gagcaggaat ggcaacgata ggtttagcag gagtaggagc aggagtggga 120
atagtatttg gaagtttggg gaatgcatat gcaaggaacc cagtattgaa gcagcagtta 180
tttgataca cgatattagg gtttgcgtta acagaggcag taggactgtt tgcattgatg 240
atgagttttt tgatactgtt ttcatagtat aggagaaaca agaagtagaa gagaaataaa 300
agagacagaa gaggagttat gagagaaaag atggaagtaa tagaagtggg aagtggagta 360
ataatgaatc atatgaaaga aggaatggag aatataagga acgattaca 409

<210> 3993
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-A12

<400> 3993

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catgggacgt attacggagt gggaaacgacc cgttcctcgt tatccagtta tcgacccaaa 120
ccctacaccg ggtaaagtat ggagcagttt ggatctatcc gagtacgta gaattgtttt 180
gcttacttcc attgggtgca ttattggttt gacttcagct acaagaacaa caagaacaag 240
tagtgtattc atgggagggc tttccggttt ttggggctct acaacgtggg cttatatgtc 300
cactagaaac aaactcagag ggatgaaaga taacgggctc ggtcgtatac cgatcgaaat 360
agcccaccag caaatgagta aataacaatc tgcgagtaac aaaagtggac aacagcttgc 420
gtcataaagc tgattagtga gatccacaac 450

<210> 3994
 <211> 389
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-014-Q1-E1-A8
 <400> 3994

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 cgcggtgggtt ttcactcata agactccaag taaagaccag aaaaccagga acttcagggtt 120
 tacgaaaaaa aagtggaaac attcagaaaa caacaatatt tgggtcaactt tgtgcagagt 180
 attttcgact cgcttcaga tatccaagga aagacacttg tgttgggagg tgatggaaga 240
 ttctacaact ccaaagcaat acgtattatt gcccgatgg ctgctgctaa tggcggttga 300
 aagctgctga tcggaaagga tggactcttg tcgacacctg cagtgtctgc gatcatatct 360
 cacagaaaac tatatggagg aattatatt 389

<210> 3995
 <211> 341
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-014-Q1-E1-A9
 <400> 3995

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 ggaattacaa gccgatagag tgtgaagcaa gttcggttgg ttttttacac ggaagtttat 120
 ggcacttttc ttgtaaaaac aaaagcagtc aaagtcgtca tgcttattct ttgcactctg 180
 ttgaaggaaa agatacgggt tggagtcctg ataattgggtt acaacctttc aagttgcctt 240
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 acgtcgtcgt ctgtgcgtcc caatcactgc ggactgtctt t 341

<210> 3996
 <211> 423
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-014-Q1-E1-B1

<400> 3996

gggtccggaga ttcacgggtc ggcccaagcg tccgattcaa cgaacgatga agttccagta 60

cgttagtctt ttattggctc ttttatgctg aggttctgct ctggctgctg aattggcacc 120

tggaattgctg gaaaaatcgg tagagagagg atatgaggaa ccttgctgta ccgaatattg 180

ttattgggaa gaaatatgta tcacacccac acccacacct acaccaacct actattacta 240

ttattacgca agaaatgcaa aacaggaaaa tgctgagaga agcgtagaaa agagtatctc 300

ttccgcagaa aaatctgatg cggttcgagg gtatttcccc acgtactact attatgagac 360

tcctacatat tattactatt atgagactcc gacatattat tactattatg agactccgac 420

ata 423

<210> 3997

<211> 159

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-B10

<400> 3997

gacccacgctg tcagaaaaaa aaaaaaaaaa aaaaaaaaaa aaactgaata acaaaaaaaaa 60

aaaaaaaaaa taaaaggggc ggcagctcta aaggatctaa gcttaagtaa acgtgaaagg 120

gacgtcaaag cacgtcaata gtgtcaccaa aattcattt 159

<210> 3998

<211> 276

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-B11

<400> 3998

ggttacggctc aggaattccc gggccgaccc acgcgtcagg aaataagtta catgtatccg 60

tggagtatag gaatggaaga aactcgtcag actcatgatc tgaaggaagt aggttcaagt 120

cctatctccg caagagtaag aagggaaga gaaaagaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaagaaaaa aaaaaaaaaa agaaaaaaa aaaaaaaaaa agtaaataaa aaatcaaaaa 240

aaaatcaaaa gtgtcaaaaa agttcaattc aaaggg 276

<210> 3999
 <211> 265
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-014-Q1-E1-B8

 <400> 3999

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 attacatttg ctcaaactgc acttgagggt acaataagag tttcaacact acatgggtgaa 120
 atgggaatga aaataccgcc tggaagtcaa tcaaatgata tgaaagttat taaaagtcca 180
 ggtctcccga aaataggctc tcgaggatat ggaaatcagt acgttcacat ccaagttggt 240
 gttcccacgc aactttctcc aaaac 265

<210> 4000
 <211> 397
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-014-Q1-E1-B9

 <400> 4000

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 acgcgtccgc tcaagtggat catcccacgt tggtaaagat agacttgtct caaggcagct 120
 ttaaagtact ccaagactgt gacagagatt tagaatgtga tcataatacc aagtttcagt 180
 tggaacttat tcagtatggt ctcttttcac ctggtttttg gacgagagaa aatgttctgc 240
 tcttctattt ggagctcgtg tcaggtgtat tcataaggga cactctctac cttttctaca 300
 acaaaggtga agaacatttg tttgcgagtt taatgctggt gttggagaca caagtttcac 360
 tgtatgcaga cattaaaaca aactgggaga aacgaca 397

<210> 4001
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-014-Q1-E1-C5

 <400> 4001

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 agaacatgac ttggaggata actgcagtgg aagtagtgaa gatggtgagg acgatattgc 120
 aagtgaagac gaatatacgg aagattccaa tccatccgtg cctataagag atgggttcatt 180
 tgaacaatat tatactggac actgtaatga gttgacgac aaggaagttt ccttttttgg 240
 aagtgactgc aaatatgttg tcagtggtag tgatgatggc tatattttct tgtggaatac 300
 gcaaagtggc aagttgatca atgtcttga gggagattgt agtgtagtga attgtattca 360
 gagccatccg atagatcctt tgatggcctc ttcaggaatt gagga 405

<210> 4002
 <211> 401
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-014-Q1-E1-C9

<400> 4002

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 aggtaaacag ttggaagatg gtcgtactct ctcagactac aacattcaaa aggagtctac 120
 tcttcacttg gtcttacgac tgaggggtgg aatgcagata ttcgtaaaga ctcttactgg 180
 gaagaccatc actcttgaag tggagccctc agatactatt gaaaatgtca agtcgaagat 240
 acaagacaag gaaggtattc ccccagacca gcaacgtttg atttttgcag gtaaacagtt 300
 ggaagatggc cgtactctct cagactacaa cattcaaaag gagtctactc ttcacttggt 360
 cttacgtctg angggtggaa tgcagatatt cgtaaagact c 401

<210> 4003
 <211> 327
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-D1

<400> 4003

tgatcatttc ccctttttgt ttgtttatcg tttgtcaaag tttggttgtt ttcttggtag 60
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gaagccacaa gtaaacctgc agcagcagat gctacaaaga cgacagaaaa gtctgggtccg 180
gaagccaagt tgaagggaac tgggtgcaaag aaacaataaa aagttgacta tgcattgtgca 240
gtcctgttat gttttgtgag ttctgtttga tagtttccag ctattctttt ggtagtgaat 300
aaagagaaaa ttttttatat ttaaaaa 327

<210> 4004
<211> 389
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-D10
<400> 4004

aattccggtt cgaccaagc gtccgcccac gcgtccgtgc ttgtttacct atgtcgatta 60
tagtgttttc cacaatatat ttgctgtggc tgctcaaat agtaatccag ttcgtgttcc 120
caacgaatct tgtaaagaaa tgaatgaaga acaactcacc aacagaagaa ggtaaaccag 180
ttggaggaga cttgttattt atagtaccga aatggagtga ctatctataa cacaatcgtc 240
tgactatgat gatttttaaaa ggcagatatt ttaaaagcct tgtaaagcaa tcctattttt 300
tttaaaaaaa aaaaaaaaaa acaaaaaaaaaa aaaaaacaaa aaacaaaaaa accaaaaaca 360
acaacaaaaa caaccacaaa ggggcgaac 389

<210> 4005
<211> 445
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-D11
<400> 4005

gtaacggtca ggaattcccg ggccgaccca cgcgtcagga gataatgcag acggagcagt 60
ttttagtttg ttttgtgctt tgtcaagctt gtctcagtaa tgaaaagcga cactcctagt 120
taaatacatg gcgttttaat ccatataagt atagttcaag tcattctcac tagtacgcgg 180
aacaagtagt cgatagtttt ctacttgatt ttccagtgaag aagtttgcaa aggaaaaggc 240
aaaagaggta ggcagtttta atactgggaa gtgacacatg tacaagtgaag acctttgacg 300
aaaacatttc actgtttgag aaaacaacct aggtgactgc tttccatcta cccaactttg 360

caacgaatac ttttgcttca ttgcttccac ggcagagtta caaccttttc caactttccg 420
 ctaaaagtca aaagagttta ttcga 445

<210> 4006
 <211> 385
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-014-Q1-E1-D12
 <400> 4006

acccaagcgt cagatattgc agttggaatt agtggagcta ttcagcattt ggcaggaatg 60
 aaagatagca aagtgattgt agcaatcaac aaagatcctg acgcacctat ttttcaggta 120
 gcggattatg gtctagtggc agatcttttt gaagctgttc ctgaaatgac caagttatta 180
 gatcaagatg gaaagacagc tgtccattct taggtgacat ttcattttgt tcgatacaac 240
 ttaaagataa atatgacttc cttgaaaaaa aaaaaaaaaa agtaaaaagt gagggacaga 300
 caaacagat aaaagattac aaccaaatac aagtcagcgg cgaacacttt aaaaaacata 360
 aaaaaaagg ggcggccgcc caaaa 385

<210> 4007
 <211> 471
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-014-Q1-E1-D5
 <400> 4007

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 ccgagaaatg ttttctgatg tgaatatcag aatatggcct tgggaaggct taatggatgt 120
 ggtaagcacc tcagaagcga tctttacttg caccagctcg tcggaaccta ttctatgtgc 180
 ggataattta cgaggtactt tggcagattc ttcaggaaca cttgtcgttg atatatctgt 240
 tcctcgaaat gttgcctcgg atgtgaagga ggtccatat gtctattcct acaatgtgga 300
 tgacttgaaa gcggtagtgg ctccagaatca gtcacgtcgt cgcaagctag ttcaagaagc 360
 agaaagtttg ttgagtgaag aattgcatgt cttttgtaat tggcatcatt ctcttgagc 420
 tgttctctgt atcactcgtt tacaagagcg agcagaaaagt attcgttcgg a 471

<210> 4008
 <211> 439
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-014-Q1-E1-D9

<400> 4008

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ggtacaacag agcactcaag agacgtgaag caagtaaaag tcgttcgaac ataaaaatggt  120
tcagttatatt gtaaaaagtc ttcataagcaa gactctttcg tttgattttc ccgcggatac  180
ctccatatgg caactacgaa agcaacttgc ggaagttgaa ggcgttcctc tagcagcttt  240
aagaattggt tctagtgtta ctgatttagg ggatgagaag agtataggag atctcgatag  300
tcagtttttg tttactagct tgagacttat gggaagtgcg anngagaaga gaaaaagtct  360
tttacgaaac cgaagaagat caagcataag aagaaaaggg tgcacttgca gtgctgaagt  420
tatataaagt ctcggacga                                     439
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<210> 4009
 <211> 473
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-E1

<400> 4009

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aacgagtgtg gcactgtcta gtcgtccaac tcagcgaaac agcaataact gtgaaaatgc  120
agtaaactag cagtaggacg gaaagacccc ataattcttg actagatagg tttagggagg  180
agagagaatc atgaagtaga ggaggtgggg taagagatga aagaccactg catgaggata  240
aggaatctaa ctgagtaagg aaaataagct taagctagtt tggctgggga agtaaagcct  300
aagaaagagt aaattaggca agcaaaggca tgagagaagt ataatagcag aagcatgctt  360
gaagaaaaag aaagagattt cagaaaggga agaaaagtca gctatagaga acaggtgaag  420
gagaactcaa aaagaggaga gcaccgaacg atcgaagaag aaactttggg ggt         473
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<210> 4010
 <211> 350
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-014-Q1-E1-E10

 <400> 4010

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 caagtaatgg tgtggaacaa acatcgtagt agaaattata agaaaattat ttcgttataa 180
 caaaataaaa acattttcaa gaataaaatt aacacctttg agttcaccaa gctcccaaaa 240
 aataacgttc tgccaaaaaa aacggggcggc ccccaaaaag gtttcagcct cacttacctt 300
 taaaggaaaa ttcaaacctc ttcaaaagtc ccccaaaaat aaattccacg 350

<210> 4011
 <211> 150
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-014-Q1-E1-E11

 <400> 4011

 aattcccgtt ctgaccacag cgtcaggtgc ttgcgcatcat acaacaacac aaattattta 60
 aaaaagagat tcctccagct aatcctgttg cttgacatgc agaaaaaaca ctattgtaaa 120
 taacttgtgt tgtcgtatga tgcaaagcac 150

<210> 4012
 <211> 321
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-014-Q1-E1-E8

 <400> 4012

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 aaggagaaac gagtgtatca ctgtctagtc gtccaactca gcgaaacagc aataactgtg 120
 aaaatgcagt aaactaacag taggacggaa agaccccata attcttgact agataagttt 180
 agggaagaga gagaatcatg aagtatagga ggtggggtaa gagatgaaag accactgcat 240

gacgataagg aatctaactg agttaggaaa ataagcttaa gctactttgg ctggggaagt 300
aaagcctaag aaagagtaaa t 321

<210> 4013
<211> 430
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-F10
<400> 4013

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gcccatgtac agtagcagag aaaggtatcc atattatgac ggtgaagtat atgatgacac 120
gggtgtttgtt cccccgaaa caaggcccaa aggaagacgt gtcatagtag aagagccaga 180
agagtacgga atgccgccag gggacagaga tgatagcgaa gatgacgagc acattggtgg 240
ttggagaaga agagaacagc acagcatgca gccttggaac cagtcacctt ttgaacattt 300
tgacagactt ttcgaaaatc ccttttctgc aatggagaga ggatgattcg gtggattatt 360
tggttaacttg ggacagtcct taagaagact ggaggacgac tttgccaaaa gtgggggaaa 420
tggaagtgct 430

<210> 4014
<211> 429
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-014-Q1-E1-F11
<400> 4014

gtcaggaatt cccgggtcga cccaagcgtc cagtaagact ttcattcacg gaaaatgtac 60
aaactgcata catattctaa caacccaaga gctcaaaaag cactgattgc ggccgaatat 120
gcgcaagtgt cagttgaagt tccacccttt gagatgggta aggataacaa gactccagag 180
tttcttaagc tatttcctt gggaaaggta agctatgttg gattctctat tggactgtgc 240
ccttatttgg aagtaggttc cagctttgga aactccccag ggacctattt cagaaagtcc 300
tgcaatagcc tggatatttg caaaattgcg ccaagataag ggtctctgtg gaagtacctt 360
ttatgaagag tgtcaagtac aacagtggat ttcttttgca gaagatgctt ttacgaaaca 420

ttatccagt

429

<210> 4015
<211> 382
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-F12

<400> 4015

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cgacgaaatt ttatgaatat gaaaccaaga aacttcctga tcgtagatga acacaatgct 120
ctttggcaga aatttggttag tgacactaaa acgtgggttac ccttctttga gttttatgca 180
gatccagtag gacatgctgc cgtaagtaca tgcgtttcct tccttttgat cattaactgg 240
ggatagtggg attgtaaatt tgttatcgca acttcgcagc ttcacgagtt caagctgccg 300
agtggatata gaaattctaa gaggtatgtg gaaccattga gccgagaaga atttgaaatc 360
agatattccg ggataatgaa ag 382

<210> 4016
<211> 474
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-014-Q1-E1-F3

<400> 4016

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cttcaaggca atactgcgcc gtatatgttg tatgcttttg caagaatata aggaatatat 120
cgtaaaggag atatagactt gaaccaaggt catcaagcag aaaacgtaca attcattctg 180
gacgatccga cggaactgtc gcttgcaaag atgttgcttc aattggaaga aatgttattt 240
ttactagaaa gggacttgaa acctaataatt ttatgogact acatgttcga actaagtcaa 300
cgctttaacc aattttatga gaattgtccg gtactcaagg cagaaacggt ggaccttaga 360
acttctcgac ttgccttggtg caaactgact gcgaacacac tcgcactgtg ttacatttg 420
cttggaaattc ctactttaga aagaatataa aaatatatgg agaagcaacc aana 474

<210> 4017
 <211> 380
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-014-Q1-E1-F4

<400> 4017

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 aggaggaaac cttccttttg aagctggatt tgcccatcgt tactgggtcg gcgttttttag 120
 gctttgttct tttggttatg agtttcacct gtatgaatat tactattcca cttacaaca 180
 gtccacagat catcaagatt tgggcagtat tcataagcat tttgggcttt ttgttgcttt 240
 tatecttttc ttccatgttt tactggatgc gaaaaaatgc tcctcgaacg gacttatana 300
 tgccttacca tggagctttt cgcggtgtta tgaactttga aaaataaatt tgggttgctt 360
 ccatttanta caattgccac 380

<210> 4018
 <211> 369
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-F7

<400> 4018

gaatgtacga aagaaggaaa aggagaagaa gagagggtag gcttagaagc agcaaaccag 60
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 aagatcaagg aagtaagagt aagagaagga gtaatgtgaa tgaaagcagg aaagtatttg 180
 aagaagagag tgtaaagcgc gtaccttttg cataatgtcc cagcgagtga aagaggaagc 240
 aaaaagaaag aaaaagaagt agccaggtaa gaaccgaagc tagttgatct tatgctgtcc 300
 aagcgaagta aggctgaacc agtatctgtg gaaaaagatt tggaagagaa tggataaggg 360
 gtgaaaggc 369

<210> 4019
 <211> 504
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G1

<400> 4019

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cacggtccg cccacggtc cggagattgc aagaagataa tattttgaat agagcactat 120
cacaaccagg agatgtattt ctgtgctttt gcaacatcca gttgttggtg aatgcagaaa 180
gagctattat aggaaatatt acttgtccag aaagtatcga attgtgtcgt ctattagctg 240
gacatatagc ggtttggttc gatgaacatt tggatgactt tcgtttggaa gctatcttgg 300
gagcactatt gtgtacttgt tattgtgagt ggaagcgttt tgaaggagaa ttgggggtac 360
aagaatggaa tgaattggag aagatatctt ccttagatac ttggaagctt gtgcttggtg 420
caagacaaag agtggataat atgttacagc gactacacaa gctgacgagc atcttgcctt 480
ttttatactc gggcgaacaa ccga 504

<210> 4020

<211> 434

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G10

<400> 4020

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tgccgtggtc cttcgatatt tctaaccctg ttggtgcaca cccaatggt ctcacgag 180
aagatcccaa cggtattcca aacaacttga tgccttaaat tgcgcaagtt gctgtatgga 240
cgtctacccg aacttagcgt ctttggggaat gactatgaga cgcacgacag aactggagtt 300
cgagactata ttcacgtcgt cgatctagcc aaggacatg ttgctgctct taacaagatg 360
gagaagcatg ccacacgttg ggttgcagtt aatttgggaa ctggcaaagg ctattctgtg 420
ttggaaatgg taaa 434

<210> 4021

<211> 488

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G3

<400> 4021

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tttcttgctc tgcccagtggt tgtaaccgaa acaagtaaatt ttgaagcatg gttacgatct 120
tcgcgtcttt tgaatacttt tacagttgga cgcgaagcaa gtgaaagtag tctttgctgc 180
ttgaagtgtc acgctcttgt ttgggggacg tcaggaccat tattgtgaca ctttcctctt 240
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atatatatat atatatatat atatatatat atgtggaaac ttgcgtcacg gaagatacca 360
agttttgaag tgggttttac ttttcgacaa acgaaaggca atcatagcag ctagtgtgct 420
tttgtcctag tacatgagtc gttgcaaagg caactttttt ttaaaaaaat atagactagt 480
ccagcgag 488

<210> 4022

<211> 462

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G6

<400> 4022

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tgaagacttg gaattttcaa aaacgtcaac acggtgaaaa tgcttgtaat attcttgtag 180
caatagtgtc tcttgttttg acatttggtc tgggaaaagt actcagtgtc ggtagtaggg 240
tacctgtgaa ggcaagtaga gcaaatacta taggcgcttt tgctccgttg ctttttgatc 300
cttacgactg tcacgagct tatagcgacc cagaactatg tctcaaggac ctttttgac 360
cgaggcctat tatatttcca tattgggtccg tgaatgagac agcaacgggg tttgtcaagt 420
acaacccttg taaccctctc aagaacgaaa cacagtgttt gc 462

<210> 4023

<211> 381

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-G9

<400> 4023

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agtataaaga agagagtgtg aggcggcgctc ataataaaaa tccgaaagga gtagaagaaa 180
agagagagaa gaaagaaaag aagagaaaag ccgtactgaa gaccgacaca ggtactcgag 240
gagaaaggag acccaaatta aggtgagaga atggacgata aggaactagg caaaaggata 300
tggtatctgc ggtagaacat atgaaagaag cagcaccgac tgttttagcaa aaacacagca 360
ctctgcacaa aagagaaaat g 381

<210> 4024

<211> 422

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-H3

<400> 4024

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gtttgttgct gtccagggaa tatttcttag taatcgatca tggcacagag caagacttta 120
gtcacttttg aacctgtgaa tctatacgag tttgaagctt tggcaaagtt gaagctacca 180
aaaatggttt atgactatta cagttcagga gcagacgac aatatacact tgcagataat 240
attgaagctt ttaaaagact tcgtttggtt cccagagtat tgggtggatat atctgcccaa 300
gatatttcta ccactatatt ggggtgttctt tccagttttc cactgggtcat tgcacctact 360
gctatgcaac gaatgggaca tcccgatggc gagtgtgcaa ctgcaagagc agcagccaag 420
aa 422

<210> 4025

<211> 97

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-014-Q1-E1-H9

<400> 4025

ttttctttct tttactgcat agactacacg gggttcctaataat ccgttttcaact tccatatgctt 60
tctcgcctca tttactgtgt ctgtgtttct atttgcc 97

<210> 4026
<211> 57
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-015-Q1-E1-A3

<400> 4026

ttacatacgc gtgtatgcga cgtcatacat catcggaacc gtcanccttaa ttcaaaa 57

<210> 4027
<211> 405
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-B11

<400> 4027

gggccgaccc acgcgtccac ggacgcgtgg ggggtctctt tgacgatgaa gaacacggca 60
aaaagcgaaa tgtagtgtga actgcaagtt ttcgtgaatc attgaatctt tgaacgcaag 120
ttgcgctttg aggagaattt attttctctgg aagcacgtct gtgggagtgg atgagaattg 180
tctttttcca atagaggaag aggataataa catgtttata gagcttttca ggggttgggca 240
ttcgtcgcct aacgataatt ctagtggtag cataagagaa gataatttga taattttatg 300
gaatagttag gaagagaaga actttttttt cttgctagat gataatatct atatatacat 360
atatatcata caatatgtat ttgtacgata aagaattttt ctccc 405

<210> 4028
<211> 320
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-015-Q1-E1-B9

<400> 4028

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gtcgtgacaa gttataatat aaaatggcca aagtaaacc c tgtgtcgtcg gctcctaaac 120
 tgggtgtaac tagagagata cctatcggtta ttgggcgtgg tatancgtgt gctatggtat 180
 ttcgccagtg gcatctcgga tacacggaaa tgataagaaa atattatcgc gagttggatg 240
 aacaagaaca gagttcctcg tcgtcgtgaa aaccgccttg tgtttgtgag atagcaataa 300
 agtggactct tgtttttttt 320

<210> 4029
 <211> 112
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-015-Q1-E1-E12
 <400> 4029

cgcggtccaac caaacctcca ctccacacgt ccgcccactc aaaaaaccac gcctcccgtt 60
 tctgtggcca attatcagaa tacctctttt caacgaacaa cgacaacacc aa 112

<210> 4030
 <211> 420
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-015-Q1-E1-E5
 <400> 4030

tcccggggccg acccaagcgt ccagaaagac attttaaagt aggcgagaaa gcataagaac 60
 tgaaacggat taggaaaccg tgtagtctat gcagtaaaag aaagaatgag taagaaaaaa 120
 gggagtcggt ccaggagggg agtaaaggcg caagaaaggg acccagggca attgacggga 180
 atcggaaaaa ggggtggatc acgtaaatta atccgatata aaccgagAAC cttacctctc 240
 caagaagggtg ttgcacggct gtcgaaagaa cctgctgtga agtgagagaa cgtacgacaa 300
 agccaagtga ggaaaagaag gcaagtattt ttttggccga gaaaggagag ggcgtaagac 360
 gtgatacaca gtacgaagaa cagagaagag agctacaaag gacgtaaaac aacagtaaaa 420

<210> 4031
 <211> 373
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-015-Q1-E1-F10

<400> 4031

acgcgtccag aaaagctttc tatctttctg aaagctgctg atctattgag cactacatat 60
cgagcacaag cttgtgctgc tgtgatgttg ggacaaggaa agacagtatg gcaagcagag 120
ggggatgcgg cagtagaaac catcgatttg gggagatttg gttgcaagtt tgcagaggaa 180
atttacaacg tgcaaccgcc tgaaaacgta aaaggagttt ggaacacaac agaacataca 240
ccgttggaag gttttgttgc tgctattact ccttttaact ttgtggctat tgctgccaat 300
ctgccttctt ctcttttttt tatgggaaat gtggttttat ggaaacctac ggaaagtgcc 360
atgttggggtg cct 373

<210> 4032

<211> 358

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-015-Q1-E1-H9

<400> 4032

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ggacgcgtgg gcggacgcgt gggcgacgc gtggcgacg tcaccttggg gattaccaag 120
tcctctcctt ttcggggggg tgcactttat ggaagcacct gtttaggcgg atgaanggga 180
gtcaaagggc aacgtggagc taggaaaagg tatactgaca gacacgagtt ggaacttgcc 240
cttgtcttca acgggaagac ctgtttctac ttccacagtc tcggacggta gtttgaaagg 300
cagtgaagct cagcctgaaa gttcacattc tttttctact attagaacga agcaacaa 358

<210> 4033

<211> 269

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-A10

<400> 4033

ccacgcaac cagaatagga cagccaatag cagatggatt gaaaaaatg ataaaagagg 60

gagtaaagcc aacaagagca gagggaatga tgtataaagc agggccagta gtaacatggg 120
 ggtggtcgat gctaggatgg agtgtagtagc cggggaggag aacgaaaggt aatagtggat 180
 atagaagtgg gaataatagc atggatgagt ataggatcat tgggagtata tggagtagat 240
 gaggaaagaa agatcaagga agtaagact 269

<210> 4034
 <211> 389
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-A12
 <400> 4034

cccacgcgat ccagaggttt atgtgccatt gcgcaagcag aaagtatgcg gtacaagttg 60
 ttgggtggat tggctgtgcg tagagcttgt tatggcgctcc tacgatttgt gatggaaagc 120
 ggtgccaaag gctgcgtcgt cactgtaaat ggggggttga gagctcagag agccaaaacg 180
 atgaagttta cggatggata tatggtgcac tcgggacaac cagtcaagga ctatgtagac 240
 actgcagtgc gccacgtact tatgcgtcaa ggagtgctag gtatcaaagt taccatcatg 300
 ttgccgtatg acccattttt ttttaaaggt ccttccacaa cactgcctga ttatgtgcaa 360
 atttaccaat caaatgaata caaagttcc 389

<210> 4035
 <211> 71
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-016-Q1-E1-A3

<400> 4035
 tagaggatca aggccgggggt acgggtgcat gagacgtagt agctcgggga gantggggcc 60
 taaattcaat t 71

<210> 4036
 <211> 270
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-016-Q1-E1-A5

<400> 4036

cgtcaacccg aagctagttg atcttatgca gtccaagcaa agtaaggctg aaccagtatc 60

tgtggaaaaa gatttgaag agatggcata aggggtgaaa ggccatgcga agctagggat 120

agccggtacc gctcgaaggc gatataggta gcgtatgcag gaaagaagaa ggtaaaggaa 180

gagaaggaac aagcagagag ggactatgag cgagaaggctg gatagtcgag agggaaaaag 240

cccagaagcc aagataaggt atcaaagtaa 270

<210> 4037

<211> 193

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-B10

<400> 4037

ccacgcgtac caagcatggc tttggcaaca tagggacaac taaaaacagt ccttattcgc 60

atgaaacctc cagtatctca cgtggcttgc acacatgtat ggcttggaca acgttgtcaa 120

gggggtacgt gcgagtcac acgatcgctc cgggggggggt tacattgccca ttctgcaca 180

aatttcctaaa tgt 193

<210> 4038

<211> 458

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-C11

<400> 4038

gaccacgcg accacggacg cgtccgcccc cgcgctccgcc cacacgacaa agtatcggtg 60

gaacagcctg tgtatgaggt tgaaaagaag accgcagaat atgagataag aaagtacccc 120

aggtggggaa tagctgaagt tcatcggttca gacgggaggg aaagaagaat ggctcggcat 180

acgactttga gtcgcaagca tttcgagtgt tggcgctgta cattgggtgta tttggagAAC 240

ccaaaaacaa acatagctcc aacacgcatg ttaagatagc aatgacagca cctgttttat 300

cacagcccat agggctccgtg ttttttttta atggacgaca gcagtctagc gtttatattg 360

cccaaggagt atgcacagca acaagaacct ccacagccat tagaccacg agttcacttg 420

cgtattgtac ctgtcacaaa aatttcagcg actacttt

458

<210> 4039

<211> 207

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-016-Q1-E1-D1

<400> 4039

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atgcgatcgt aaacctgagg anttgggaac gtttggaact atacacaact gtgagtattt 120

tagggctactc tttagttcca atcgtcatat tgctgttctt gctgttgggt ttgtttctta 180

agaagtcgtc cttgttacct tttattt 207

<210> 4040

<211> 379

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-F11

<400> 4040

gttgccacta tattgcttca aagagggact gagaatatga tggacgatgt tgaacgtgct 60

attgacgatg ctgttaacgt atttaaagtg ttgacggggg ataatagggt tcttcctgga 120

gctggagggg gagagcttga gttggcccgt cagatctctt cgtttggaga gaagagccct 180

ggctcttgatc agtatgccat aaagaaatat gcagagtctt tacaagttgt tcccacgacg 240

ttggctgaaa atgctgggct caaggcaacg gatgtgggta gtcctcttta tttcttttat 300

acgtcaggac acagcacaac tggtattgat attgaagctg gaagtaacat gcacgaagac 360

gttgctggtg tctccttgt 379

<210> 4041

<211> 257

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-F5

<400> 4041

aatattttca attggatgag gatccctcgg ttgccgaatc tgaatttcgt ttggtcacga 60

atgctgttgg gggggcaggg aaacttaggg aaacgaacat tggggacacg ggtttacaaa 120

cctgtccca gttgttgaag aatgtccact cgtcaactta tcaagtccat ttctacaaga 180

catatttcca gttgatattg aacgatattc tcgtggtacc ctacagatac ttgcccaccg 240

cctgtgcgta aatatca 257

<210> 4042

<211> 366

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-G12

<400> 4042

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atattttaaa gcaagatgat acctttatca aaggattcca acgtccagta aagagacgac 120

ggggctgcac aaatgtcatc atcatcttga gaggggctgc aatcttgtcc aaagagagat 180

tggtggccat ccaacaccac aaagcagcat ttcccaggat agaaacatcg tgggaacaga 240

atggattgaa gtcgcgtctc tgtttatgat agaaatcata tactgtccgt tttatgttgc 300

caaaaatata aacatttatt cttccttagt ttgtaaatat atgcaatcag gaggatattc 360

ggactc 366

<210> 4043

<211> 430

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-016-Q1-E1-G9

<400> 4043

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tatgggttgt tctttttgtc ggatattcat attctgaaga gcatttttcg catatacgaa 120

aaacttttct atggggggtt tttatatgat tcctaattca atggggaggg gaaagaatgc 180

tgaagagccg gttccacgtg gaaccaaagg cggttttgta tctgccttga aaactagtac 240

tttgcctctc aaatatagct gtacaatgtc gccaaattta acttgtacaa tataactcaa 300
 aaaacaaaca aaatccaagt tcgtaataat ctctttattg tactcaaggg gccagaaatt 360
 gatcaacaaa acatgttcaa ttatccctta aactacata tcaaccagtt gctgatattc 420
 aagaattttc 430

<210> 4044
 <211> 122
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-A1
 <400> 4044

tccgggtgac ccacgcgtcc gctatcgctt cctctcactc atctgcccac gacgtccaaa 60
 aaaggtttca caaaactcaa taccacatt tcaggctgct acaccggtaa aacccttta 120
 cc 122

<210> 4045
 <211> 325
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-A9
 <400> 4045

gacgcacgcy tcaaccacac agtccgcatt tacgctcatt gcaaattgtgt atgcccgaga 60
 gattctaaat tcgacatgaa atccgatagt tgaagttcat gtcactacag atctaagtgt 120
 gactcggaca actgttcctt ctagtgcgtc aacaggaggt tacgaagctc acaagttgag 180
 agataacgac aaatccaggt atcaaggaaa cggagttaca actgcaatac agtctgtcaa 240
 taccgaactt gcaatacctg tgattggtta ggattgtcga gatcagacac cgattgatcg 300
 aatgatgatc tctttggatg gaatt 325

<210> 4046
 <211> 339
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-C10

<400> 4046

gcgtcagctt atatggagtc acttattcgc agcgaaaaac aacaaataga aaagcaaaaa 60
gaaaagaaac aaatgaagga agaaagagag ttccttatgg ataaaatatt tacactgcag 120
ggtggaccaa gacacctctc accaggagag gaggtcacia agccaagaaa aagagacaag 180
taaaaagata aaaaagttat cgaaaccaat agtaaaaaaa caaaagacaa aagacaggcg 240
aaggcgacaa aagataagga acagaatgca acaagcagtt gctatgttga gcagtttagac 300
ggaataagtt ttacggatgc aggtaccttc aactttgtt 339

<210> 4047

<211> 351

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-C11

<400> 4047

gcgtccgccc acgcgtccga caagacgggtg agtcatccga agaaactgaa aagcgtcaat 60
gccattcaat gggcaccgca ttccgcttcg catatttgtt cggctggaga tgatggtcgg 120
acgttgatat gggatgtttc tgcgattcga gggcctatcg aagaaccgat tctctcttat 180
cagtcggata aggaagtga caatttgcag tggtcggcag cagatccgga ttggatagcc 240
atagcgacgg gtactaaaat gcaaattattg cgagtatgaa agtggttaact ttacaaagca 300
atgttgatgc attgtcgtaa tatgacgtaa tgatacaaag gcactactaa a 351

<210> 4048

<211> 351

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-D5

<400> 4048

cacgcgtcaa agaatgaaac gtcactccag tattcaaaaa gaattacctg aattagaaca 60
aaaacttgcg caaggtgcca tatcacctcg aaaagctgcc ttgactttgt tggatatcgt 120
ttgtggaggg cacattctcc aacagacaat taatcagggg gcgttccgaa cattcttttt 180
ctctacttgt gaagtattga ggcaattcat atcactactt ggatgattat ctgtacaaca 240

ttcttgatca caattcactt gaattgtcga atgaacgata ccaaaacgct ttcgtagtat 300
 ttcttgagca gttaataaag tgttttttat ttcactcgca aaacaaaaag c 351

<210> 4049
 <211> 329
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-E3
 <400> 4049

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 aaataagtga aatgactgga aacaagtcac ctcaggacca ggcgaaggat aaagctagcg 120
 agggggggga ccgtatgaag gatgcaggaa gtgcgggggg,ggaaagtgct caaaatgcag 180
 gggacgccgt caaggataag atgtccagca tgaaggagtc tgtttccaac aaagcggaag 240
 gtgtgaaaga aggtctgcaa aagtagatac tccgaggta tctcatttgt ttcgtcctgt 300
 ttgtgtttaa ataaaaattt gggtttttt 329

<210> 4050
 <211> 347
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-017-Q1-E1-F10
 <400> 4050

cgtcaaccga cacgtccgta gcagtatggc acccaaagga tccaaaagtg taccggttgc 60
 tggaaaaaag cccattggta aagcagaaaa gaaaaaagcc aaaaagaagc gtgcagaggc 120
 ttacagtatt tatatttaca aagtgttgaa acaagtccat cctgacactg gtatatcttc 180
 caaagcaatg agcatcatga attcctttgt caatgatata tttgaaagga ttgcttccga 240
 gtctagcaag ctggcagcat actcaaagac aaaaactctt acttcgagag aaattcatat 300
 tgtttgtacg ccttttgta cctggagagt tggccaagca cgcagtt 347

<210> 4051
 <211> 96
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-H11

<400> 4051

atattaattt ttttaagcttt taacagtttt gtaaataatat tcacgaaaag ctgatacgcg 60
ctgattaaat atcaggtttt tgaaaacaaa caaact 96

<210> 4052

<211> 256

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-H12

<400> 4052

catcaagcgt gagactgcag agagtggaat cgaacaagaa caacaccatg gcgagccgat 60
ttaactttcc atttcttggt tggtgattgg ccaattccca acggctcgac gtgttgggggt 120
ataaatcgta gcgttcgctt cgggtgggagg catgttcagt tggttgtaga tggaatcgtc 180
catgaataat aaaccaagca ccaagccata aaaaaaatt ggacataaat aaactaaaaa 240
tcagaccaaa ttcaac 256

<210> 4053

<211> 434

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-017-Q1-E1-H8

<400> 4053

cacgcgtcaa gaatacttta tcataaaggc cgggtggtgaa gatgaagttg ctcacgtacc 60
actttttaca atgtcccaaa accaaaacct ttcctttggt attggagcct actcaagtag 120
aagcgagaga aacagaatat aacaaggaat ttagcgtgcg catgattcct agactagatt 180
ggaacctggt tcgacaagta agtaaacagt ttgcgtttgg tgaactgcca ccagtagctc 240
cccacaacga cacaacggat gaagaaactt tacgaatgct tcacaagttg ctattggaga 300
cgcatatcaa ggaaggagtt ctcatagtc aagatggaac tatttatccg ataaaagatg 360
gcattccaaa tatgctcata acacaagtca accaagacga gtaaagaaaa atagatattt 420
ggtttaaaac aaac 434

<210> 4054
 <211> 399
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-A2

<400> 4054

tactggtcta cgaattcccg ggctgacca cgcgtcagcc cacgcgtccg attgcccttg 60
 tcgtctaaca aagacacacg ttaaccttgg tccattacta ctaggaatga cccttcgtaa 120
 accagtcttt accaaagtag agggactaca acccgggaca caggggcaca acgggatcgt 180
 tcaagtgatg aacgtcgggtg aggttatgga aaaagtgaga ccgagtgggtg acaaactgca 240
 aatcgccgaa gtgctacttg cagatgaaac tggagcggta ttatttacag caaggaacga 300
 ccaaataaaa ctttttaaaa agggagagtg tgttaccgtt cgaaacgcaa aagtcaatat 360
 ggtgccaggc tttattcctt tactagttga caaatgggg 399

<210> 4055
 <211> 383
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-018-Q1-E1-A4

<400> 4055

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 gtcgtaaaaa cttctggtac ctatgcttct cctttattcc atacttatcg ttctcctcg 120
 aacgatacga ttgctgcaga gggggacaag atgaaaaact tcacaactct gtgcagtcta 180
 cccaaaattg ccaatctgac tagtactttt gaaaacgctt ctcttgagcgt tacgctcttt 240
 gcaccaacac acagcggaat ctcttcaaca ctcaaagcag tgaatatttc ggcaagcccc 300
 atatacaaaa acaccactct ggtaaattt tttttctagt atcatgtcct acctgagcca 360
 ttaaagactt ccaaattctc cgc 383

<210> 4056
 <211> 374
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-B2

<400> 4056

aattccgggc cgacccacgc gtcagcccac gcgtccgaga gagagaagaa agaaaagaag 60
agaaaagccg tactgaagac cgacacaggt actcgaggag aaaggagacc caaattaagg 120
tgagagaatg ggcgataagg aactaggcaa aaggatatgg gggctgcggt agaacatatg 180
aaagaagcag caccgactgt ttagcaaaaa cacagcactc tgcagaaaag agaaaatgta 240
aagtatagag tgtgcgcgct gccaaatagt agagaagaaa tcgatgaaag tgaaagcgag 300
taaaagatga ggtatagata atggcgggtcc taacggtaag gatccaaagg tagcgaagta 360
aatagacggt tgaa 374

<210> 4057

<211> 268

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-B3

<400> 4057

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gagcgaacat aatgggagca ggaatggcaa cgatacgttt accacgagta cgagcacggg 120
tggcaataat atttgaagt ttgatgaagg gggatgcaag gaaccacta ttgaaccaac 180
acttatttgg atacacgata ttaaggtttg cgttaacaca cgcagtacga ctgtttgcat 240
tcatgatcac ttttttacca ctgttttc 268

<210> 4058

<211> 393

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-B4

<400> 4058

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gaatattgtc aaattcaatg tcaactcgat aaggatttag agttgcggaa tatttggag 120
aaggaaaggg agtgtgtcta tttccgtaaa tgattttgtg ggtcgagcta ctgcacttgc 180

attgagacga gtaccagagt tgaatatcgt ttgggatgaa gcaagccaaa gtgggaaacg 240
aatggaacga gtcgatatct ctatggcagt tagtattgaa aatggcttga tcacaccaat 300
tataacggac gcggatattt tatgaataga agaaatttca catacagcca aagagctcat 360
tatgaaagca cggcaaggca aactgaaacc tga 393

<210> 4059
<211> 412
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-018-Q1-E1-C2
<400> 4059

tactgggtcta gaattcccgg gccgaccac gcgtcagacc aactggtatg aggacgacga 60
ctatcgaaga cgacctgttg cctttcaaag tatttcgtct gtcttggtcc accgcacacc 120
acaagtattc atatcgaaaag ggggagttgg caccgttgca cgtattcctt cgggtcctct 180
ttgtgctagt gggaaatata gtctccgata tagacaccaa ttcatagcaa ctcttttatg 240
gtctactcgt ttcaaaaactg ggaaaagaga tgagcgctac aaaagtatca agtaacgtcg 300
ggagcggttg aagacaagac agaggatgga tgtatcgaca attctatgga cacagtcaac 360
tcagagcagt cgaaaataac gaccgaggaa gacgggtcca cagagtcccc at 412

<210> 4060
<211> 390
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-018-Q1-E1-C4
<400> 4060

ttcccgggcc gaccacgcg tcagaccacg cgctccgccca cgcgtccgcg atcgataata 60
ttctgatggc acttttcttg aataatagcg gcggtgcatg ggacaatgcc aagaagtata 120
ttgaaacagg tgcatatggt ggaaaagggt ccgaggctcg gggggctagt gttactggag 180
atactgtggg tgatcctttt aaagatactg catggccttc cttacatgtc ttggttaaat 240
tactatccac cctcacactg gtgtttggtc cgctgttctt gacttctgcg ggaatagaag 300
tcatttcggc ctatttttta ttaccttaca tatcttcttc gtgtctctct tgtgcttttg 360

tttatagcag cattaaacca tattgttttt

390

<210> 4061

<211> 362

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-D12

<400> 4061

acccacgcgt cagagaaaga ggcaaatacg ggaaagcagt aaaagaagaa agagaaagga 60

aaaaaactga gtatcaggaa gaaaagaggg agtacatgag gaaagaaaga tcagggaagg 120

gagagtaaga gaaggagtaa tgtgaatgag agcaggaaag tatttgaaga agagagtgt 180

aagcgcgtac cttttgcata atgtcccagc gagtgaagaa ggaagcaaaa agaaagaaaa 240

agaagtagcc aggtaaagacc cgaagctagt tgatcttatg ctgtccaagc gaagtaaggc 300

tgatccatta tctgtggaaa aagatttgga agagatggca caaggggtga aacgccaatc 360

aa 362

<210> 4062

<211> 387

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-D2

<400> 4062

aattccccgg cgcacccacg cgtcagccca cgcgtccgag aaattgctgg acttggaat 60

ataaacgagg agagtcaagg agacttgtag gcctatttgg aaagcaaaaa aaagacaaag 120

tcaccactcc agacctaaagt tctctttggt ggtggcggag gcggtggtgg tggagcagga 180

gaagctgctt tggttccatt ctgtaaggca ccacttttcg gaagaggagg aggaggaggt 240

ggtggtggaa gtgttggtgt tggtgtagct gcactattta cattctgttt atccgccagg 300

ccgtcagggt gcggtgaatt attagttact gttgttggtg ttgtttagac tgcactattt 360

acattctgtt tatccgcctg gccgtca 387

<210> 4063

<211> 394

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-D3
 <400> 4063
 aattcccggg cgcaccacg cgtcagggtt tactttcttac cgtgaaaggg catggaaaaa 60
 cgtatacaga aaaagttact tttattgtaa gagatgctgc gcaacccgaa cacgaaagcc 120
 ttcaagaaga ggaatcggat gaaaattgca tcgtgcttga ggggcatttt ccaaagaatg 180
 aagcccaaca ggctgctgaa ctcgtgtcac catcgacttg agtcgagctt gaacaaacaa 240
 caaggaagaa ataacgtcaa ctccaacaac tggtagagact attattatta tgtttggaag 300
 aaagagaaac aaaatgctta tctctcgtca atatctcgat gacctattca ttcttccttt 360
 gttttcctct cttttgtgct gcaatatata gtac 394

<210> 4064
 <211> 360
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-D4
 <400> 4064
 attccggccg acccacgcgt cagcccacgc gtccgcccac gcgtccggaa aagacatact 60
 gaagaccgac acaggtactc gaggagaaag gagacccaaa ttaaggtgag agaattggacg 120
 ataaggaggg aggcaaaagg atatggtatc tgcggtaggg gatatgaaag aagcagcacc 180
 gactgttttag caaaaacaca gcactctgca gaaaagagaa aatgtaaagt atacagtgtg 240
 cggcctgcc aatagtagag aagaaatcga tgaaagtga agcgactaaa agatgaggta 300
 tacagaatgg cggtcctttt attaaggatc caaaggatc gaagtaaata gacgtttgaa 360

<210> 4065
 <211> 395
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-E1
 <400> 4065
 cgtactggtc taggattccg ggccgaccca cgcgtcagcc cacgcgtccg cggacgcgtg 60

ggcccacaag tccgcccacg cgtccggagg caaatacggg aaagcagtaa aagaagaaag 120
 agaaaggaaa aaactgagta tcaggaagaa aagagggagt agatgaggaa agagggatca 180
 aggaagtaag agtaagagaa ggagtaatgt gaatgaaagc aggaaagtat ttgaagaaga 240
 gagtgtaaag cgcgtacctt ttgcataatg tcccaccgag tgaaagagga agcaaaaaga 300
 aagaaaaaga agtagccagg taagacccga atctatttga tcttatgctg tccaagcgaa 360
 ctaaggctga accagtatct gtggaaaaag atttg 395

<210> 4066
 <211> 295
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-E11

<400> 4066

accacgcgt caacggacgc gtgggcggac gcgtgggggtt tttaaaccgg aataaatttt 60
 tttatttttg cttgtaaaga caaactgttg tgaattctat acgttggtat taggggtggga 120
 cctctctcgt tattaaaagc tgggcagggg caaccagtgt tgggtgaact gaaaagtggga 180
 gacacttaca atggtcactt ggtgaacatt gactcctgga tgaacttgaa cttgagagac 240
 gtagtttggga cttcacgtga aggcgaccgt ttttggaataa ttgctgaaat ttatg 295

<210> 4067
 <211> 390
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-E4

<400> 4067

attccgggcc gaccacgcg tcaggtcctt cgtccctcgt cgtctcctcc aacaagtacc 60
 aaaacataaa atagaaaatg gcaactttac tatccaaaaa aagaagagca gtagccgacg 120
 gtgttttcag ggcagaactt aacgagtttc tgatgcgaga ggtgtcggaa gagggatact 180
 ctggtgtaga agtgaaaccc acgccgttgc gaacggaaat cgtgatccga gctaccagaa 240
 caaaaaacgt gttgggagaa aaaggtcgaa ggattagaga actcactgcg ttggtacaga 300
 agcgattccg ttttcctgat tgaacagtgg aactttatgc ggaaaagggt gcggatagag 360

gtttatgtgc cattgcgcaa gcacaaagtt

390

<210> 4068

<211> 98

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-E9

<400> 4068

caaaggatcc aagcttcact acgcgtgcat gccacttcac agctcttcta aactttcacc 60

taaattcaac tcactgttct ttttttcttt ttcttctc 98

<210> 4069

<211> 350

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-F11

<400> 4069

accaagcgt caacaattgt tcattccacc atactctact cctatggatc ctaaagcgca 60

aaattgtcat aaagcagtgt atatggccga gaaagtgacc gttgatgaaa acagggcagg 120

tcacatgggt tgctttcggt gttcaacttg caaagtgaaa cttagcctcg gaaattacac 180

actgttagat ggagttctct tttgcaagcc gcactttcat gaagcatttc tttctgctgg 240

aacatatacg gcaccggaca acacaaaaaa gaatatcgag gaagcttcaa ctaatgagac 300

tgattattgt gttgcgtcac aaacaagtca aatattatca tctcaaactg 350

<210> 4070

<211> 383

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-F12

<400> 4070

ccgggccgac ccacgcgtca gccacgcgt ccgagcagct tctgtgttgt atcatgtgca 60

ggaacacgag tcaccagccc gatctttcac tattacctcg aggggaactc ttcttctgga 120

aaaaagtcaa gggtccgctc gtggaatagt gttgtgtgag gcaagttttg aacatcgag 180

ttgttggatg cacttggaaa agtgtttaaa gacaggaaac aaggtagttc gagatgtatt 240
 tggagaggat aactatcttg atgcttttgc aaaagaaaac tcgcaacaca aagagtcttt 300
 aaaagtcttt cattaaggga tggcttccgt gagcgagttc gacacgcgat ccatccttta 360
 tagttttgac ttttcaaagt ttc 383

<210> 4071
 <211> 264
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-F3
 <400> 4071

taccgggtcta gaattcccgg gccgaccac gcgtcagaac gaggtcggcg aggttttcga 60
 acgattagca aggttatatg gaccgttttag aaaccttata aacaggaaaa caagagcggt 120
 ttcctgtgaa acaacaaaaa agggaaagta ctaagtaata ctaacagtac tggggcactt 180
 aaccttggga aaagacttgt tgtacttttg tggttgttat tgcttgcgcc tacgtgagaa 240
 atgaccggag ccaacgacaa aacc 264

<210> 4072
 <211> 455
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-F5
 <400> 4072

ccacgcgtcc gtaggccttt gtgcgtcgtc ttacggttta cgattgataa tgcggtttgg 60
 atatggcaga cccccaaact gaaagagcgt ttcaaaaaca ggacgctata tctttaaaagc 120
 agatcgcggg agtatccaaa aagaatgcaa gatggtaggg gaatattggg ttaggaatca 180
 aaacacccaa ggaagccata gagggagaat atatagacaa aaagtgcctt ttacgggaa 240
 acgtgagtat tcggggaaga attttgagag gaacagtggg ttcaacgaaa atgaagagga 300
 ctgttatcgt tcgaagagac tatcttcact gggttcgcaa gtacagacga tttgaaaaga 360
 gacacaggaa tattccagca cattgctctc cttgctttcg cgtgagagaa cgagacgttg 420
 gtaccattgg agaatttccg ccgttatcca agaca 455

<210> 4073
 <211> 388
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-G1

<400> 4073

attccccgggc tgaccacgc gtcagaaact ttgcactcac acattgaaga gcaaaaaaat 60
 aggatgaaga acttgataca gggtcagatc gaggagcatg aaaagattct gtttcaatta 120
 gaagacgctg ggagtctttt gcgttccatg gaacgtgatg ggaataaggc cctccttgaa 180
 gtgcaagatc gcataagaaa tgcaacaaaa atttgtgatt cctggaaaga aatcaaaact 240
 gccttggacc aaggactgaa attttatcac acggcactaa caattgccac gcaactgaaa 300
 aataatgttg aaactatttt ttaataattc cagttactga gacttagaac atgtatatag 360
 ctaaaaaaat ggattgttta tccggatt 388

<210> 4074
 <211> 382
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-G12

<400> 4074

ctccccgggcc gaccacgcg tcaggtgctc agtcagaact gcttctcagt tagatacgca 60
 atatgcctag tcataaggaa caaaataaag gaattaaaat atcagctgac ggttacgcac 120
 tagggttggg cggatttcgg ttggacgtac acggcagttg ggtcactatg gtggacgcag 180
 acgacctcag agccctcatg tttaaggaaa gcctcaagga aaagtcaaag ctgcatgacc 240
 caaaattttt caaaagctat tatgaggaga ataaggacta cttttattat atgactcata 300
 cggagaataa aatgtttctt tccccggaag ttgcacgaga atacgctact ctggtgggaa 360
 actcgtttct gcacaaatat tt 382

<210> 4075
 <211> 384
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-G2

<400> 4075

aattccgggc cgaccacgc gtcagcaaca tgtctttttt gaaacgtata cagtcaaacc 60
tgctttccaa cagaaactca gtaacaaaga caagtaaggc caattacgac ataaagcacg 120
ttcgagtttg gggctgggac cctgaaaagg gagaagaacc gggattgggt acctactcga 180
ttcctctcaa agaatgcggt cccatgggtg tggatgcctt attcaaaata aagaatgaag 240
tggactctac ttttgtattht agaaggtegt gccgagaggg aatttgtgga agttgtgcga 300
tgaatataga tggaaataat cgtctggctt gtttaactcc gttagcagga ccgaagcaga 360
cagtgactgt atatccttta cctt 384

<210> 4076

<211> 371

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-G4

<400> 4076

attccgggcc gaccacgcg tcagacagtg tgctgtaaag ggtctgagct ttacaaatct 60
gcatatgcaa agctcagtcg caatttctac tgttcatgga ggaagattca cgcaacagta 120
acgtcttttg ccgactggac ggaaacaagt ttcggagagg ggctttattg ggtgcaaaag 180
gggtcgggaa gtcattccatt gctaccgct ttgcagaaga cacctttttg gactcgtacc 240
ttccaacat acaggattcc tatcacgcga cttgcagaca caaaaacgaa acttacaact 300
tggagatatt ggacactggt ggacaggacg aatattccta tctcggaaca cagctgacta 360
tcggagtaca t 371

<210> 4077

<211> 395

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-H1

<400> 4077

taccggtcta gaattcccgg gccgaccac gcgtcaggaa tcttgcaaag gccaaactgaa 60

agcgcccata tagttgttat tctctactgt ttgttgcccc ttgtttttaag tgaacaacag 120
gaaactcctt ctttaccttc cgggacgttg actagtgcgg ctgaagtgtt caggggaagat 180
gcacctcacc cgttgagtag aaaccttcct tcttccaaag agatagaagt agcatattct 240
tttagtggtg caacggatga aaaaagtata cagcctggga ctctggtaga ttgttttagtt 300
ggagtggcaa atggaggacc ttttccatat cgaatattag cagttgggtg agctttgcac 360
tcccccttgc agtttaacta ttatgttcaa aactt 395

<210> 4078
<211> 323
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-H10

<400> 4078
gtcagcgctg ttggtcactt gtagaatgac ttgtaacaca tgagccaaat gccataataa 60
atgtcactgt gcttgactcg ttctacctta tttatgtagt attcggagcg ggcagcagtg 120
gtacaaacgt gaaggatagg ggtccctcgc cgtcgtggca acagaatgtg gttttgtgag 180
gttttgtagt gttagtgtt gtataaaaga attggaatag aataaaatat gtttcgcgcc 240
tattcttcta caacaaacga ctaaacaact aacactgaaa aaaaaaattt tttttttttt 300
ttcgctctac aggatccaac ctt 323

<210> 4079
<211> 342
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-H3

<400> 4079
ttcccgggct gaccacgcg tcaggattcg tcgcaagtct ttgaaaaaa gacaaaaaag 60
ttcaaacgtt tccagtcgga taggttttaa agagtcaagg aaagctggag gaaaccaaaag 120
ggaatcgagg gcagagtgcg tatgcggttc aaaggttcgg ggttgatgcc caagatcggg 180
tatgggacag ataacagaac gagacacttg ttgccaaacg gtttccacaa gtttgtacta 240
aataatgtga aagaattgga cgctctactt atcttgaacc gcaaatatcc accacaaata 300

gcgcacggag tatcttcttt taagatgaac gaaattttgg aa

342

<210> 4080
<211> 390
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-H4

<400> 4080

atccccgggcc gaccacgcg tcagcccacg cgtccgggag caccttgacc gccattggca 60
tataccttac tcgagttact tgactgtaag tgatattggt gtagctcttt tgcgttatag 120
aggtcagcga gacagaggag caagggcgag aaacttaggg gcaagcgaga gaaccttcaa 180
cgcttggtt cgttcagggt taggagccat ggctttagga acaatagcct ctagatatat 240
gtatacagca gttggcaagg ctgcagctat tttgttattc tgtcttggtg ttctcattat 300
tttgtactgt ttggtccgac attatcatat agttttccaa gtagaggaag acattttgta 360
ttccactact gttcttccta gaacattttc 390

<210> 4081
<211> 386
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-018-Q1-E1-H7

<400> 4081

ccacgcgacc gaaagagaga aagagaaaga gagcgactg cacagcttaa gatgacgacg 60
agggtggtgga aagtaacctc ttcgttattg cgtttatcaa ctcgagttac cacacttcgg 120
acctctgtgt gccaaactctt atccgaaagc aagtttgagg catttgaata cttccaactt 180
aaagttgagt gaagaaaagg aaactttcca ctttatgcc a ctgtcttaca acgaagatgt 240
gagggcagtt tcaggtatat atgcacctga tgaacctcct caggctccac tacctttaga 300
ttatgagttg aacgggggaat gtgacttttc tatacagttg gatatgcacg aggacgtttc 360
tgatagagaa gcagctatat gagttg 386

<210> 4082
<211> 375

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-018-Q1-E1-H9
 <400> 4082

accacgcgt cagcacgaca cagaatggat acttttttaa tatatgactc caccagtcaa 60
 cgattcgggtg tagctgctga acacgtttat gacgtaaacg aaaataccaa gttgcgttgg 120
 ggtgggaaaag ttcgtcacgg agaatcgggg gcggcaggat atgtcattgc cgaatatgac 180
 ttacggttt ccaaagaaga ttttccgata aacgttcgtg cacgtgcat atgtaaaagt 240
 aaccagtgc tggcgatat tctgccc aaaagtttg aagtggacga agacattct 300
 ttattcttct tagccaaagc ttgtactcag gaactaaca aaggaagtta tattattggt 360
 aaaacctgag tgaca 375

<210> 4083
 <211> 358
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-A1
 <400> 4083

taccggtcag gaattcccgg gccgaccac gcgtcagcct ctccaagaag gtgttgcacg 60
 gctgtcgaaa gaacgtgctg tgaagtgaga gaacgtacga gaaagccaag tgaggaaaag 120
 aaggcaagta gaggcgcc cgagaaaaa gagggcgtaa gacgtgatac agagtaggaa 180
 gaaaagagaa gagagctaga aaggaggtaa aagaagagta aaaggactag aagaggtacg 240
 gaattcacga agaaggagcg tgaaggaagg aggaatccca agtaatcgag gaagaaaaag 300
 cttcggtgaa agcgtgaacg gattttgtac aactgcccg tcaagttctg gaagtgtg 358

<210> 4084
 <211> 314
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-A4
 <400> 4084

accacgcgt ccaccttaat taacaatcca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaggaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggaag acgctccaaa 120
 ggtcttaaac attacgtaac ccatcaagaa aaaataagaa tttcttcaaa atggtaccta 180
 aaattaaatt ccctgggcgt tcttttaaaa aaaaggggg gggaccccc aggtttttac 240
 cctaatttaa cccttttgca aaaaattcac ccttttcaaa aggggcctaa aaatcaaatt 300
 tccgggccct tttt 314

<210> 4085
 <211> 403
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-A6

<400> 4085

ggtaccggtc aggaattccc gggccgaccc acgcgtcaga tcttgtccaa gtgagaatgg 60
 cggcaaagaa tgaaaactct tgttgtatgc ttttgcaagt gaagagacta agcaaggacg 120
 ctgttgtacc tcaaagaggt tcgaaacttg ctgcaggtta tgacatttgt tcctcggaag 180
 actgtattgt accagctcga agtcggtact gtgttaaaac tgacttggca gtggcgattc 240
 cctcgggaca ctatggaaga atagcaccca gatcaggact tgccttaaag catggaatcg 300
 acgtaggagc tgggtgtata gatgaggact atcgaagaag cctcgggtatt atttttagtta 360
 atcattccga agaggatttc catatatcca agggaaatcg aat 403

<210> 4086
 <211> 345
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-A9

<400> 4086

caaaaagagt caacccttca cttggtattg cgtttgaggg gtggaatgca gatatttgtg 60
 aagacactta caggcaagac cattactctt gaagtggagc cttcagacac tattgagaac 120
 gtcaagtcca agatacaaga taaggaagga atccctccag accagcaacg tttgatattt 180
 gctggaaagc aactggaaga tggtcgtact ctttcagact ataattattca aaaggagtct 240
 acccttcact tgggtattgcg tctgaggggt ggttgctaaa tatttcagca agtagtttag 300

tttagccctt attttctgaa taaatattcg cagttcttgt caaaa

345

<210> 4087

<211> 394

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-B2

<400> 4087

ggtcaggaaa tcccgggtcg acccagcgtc ggccaaccct tcggccaacc gttcggcaaa 60

aaaatggcaa ggaggttggg ttccttaaaa tcagttaagg aatttgcctt ggtctaattc 120

ctgtgcttat atcgttgccg ctatTTTTgt gcatgtttca ggaaattggc gctatatgct 180

cgggagtact ttggtatTTT catctatatt actgatagcc atgcttacat taccgaaac 240

ccctcgttgg ctgatgagaa aaggaagaga ggggcagtcc tataaagtat ggagtattgt 300

gcgaggattt gatactgaag aagaaagaca ggagtttttt gtgatgagaa agacggtgga 360

acgggagttg gaagagtcta aaaacagata tgtc 394

<210> 4088

<211> 416

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-019-Q1-E1-B3

<400> 4088

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gttaccgcaa aaaacttacg ggcttggcac gtacctttcc aaagtccgtc ccccgaggag 120

tggtctgaga gggggatggt tacgaaatgt gaaattttca accacanacg acctgcaaag 180

ttgttatcta cgaaaatgag aggaggcgac catgaaagga gagaacttag tcgtcctatg 240

cgtacgcttg attccgcttt cgacgaactt ttagcttttg cgcaggatcc ctgggtccatg 300

tttcgctctc catggagtct gtcgcccaga agtatggcag tagacacgtg gatgcctcgt 360

gttgacttgg tggagaaagg aagatggctt ttatgcatac gtggaactac caggac 416

<210> 4089

<211> 399
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-019-Q1-E1-B4

 <400> 4089

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ttgtacacac tgcccgtaa gttctggaag tgtgctagga atgtgaggaa aagaaggcaa 180
gtagagggcg gcccagaaa ggagagggcg taagacgtga tacagagtag gaagaaaaga 240
gaagagagct agaaaggagg taaaagaagg tgttgacgg ctgtcgaaag aacgtgctgt 300
gaagtgagag aacgtacgag aaagccaagt gaggaagaagg aggcaagtag agggcgggccc 360
gagaaaggag agggcgtaag acgtgataca gagtacaaa 399
  
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<210> 4090
 <211> 392
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-019-Q1-E1-B7

 <400> 4090

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aaaccttacc atctctggcc aggagggcct ggacagttga cagctgacgg aatgagagct 180
catttcgaac ttggcaggca acttcgccga cgatacgtag attcagggtt tcttgaccaa 240
aatctgtccg tcaacgaggt agcttcagct ccttgctgtg aagccgtccc atctgatatt 300
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<210> 4091
 <211> 382
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-019-Q1-E1-C1

<400> 4091

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tctttttcct tctgggtcat acggcaacat gatggtaact ttgataccta gcactccttg 180

acgcataagt acgtggcgca ctgcagtgtc tacatagtcc ttgactgggtt gtcccgagtg 240

caccatatat ccatccgtaa acttcacgtt tttggctctc tgagctctca acaaaccact 300

cacagtgacg acgcagccct tggcaccgct ttccatcaca aatcgtagga cgccataaca 360

agctctacgc acagccaatc ca 382

<210> 4092

<211> 84

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-C2

<400> 4092

cgggtcgaac cac'cggtccg tataaagtgc tgggcctgga aaagaacgct tccgagagag 60

aaattaagcc cgcgtaccaa caac 84

<210> 4093

<211> 453

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-019-Q1-E1-D3

<400> 4093

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aaaatattta ctcatTTTTTA caggacaaga gggtaccatt gtctaattatt aaggaatcct 120

tgaagaggca acgagtacaa gatgacgaac acgacgaagg tttgggtgag gatgaggatt 180

tagatgaaga agaagaagag gaagatgaag attttgatcc caacaagaag gaagaaagtg 240

atcaggaaga aggtgggtggc tctgcacaga gtgatgaaga aatgtcagag aagagtgacc 300

aagaagaagg cgatgactag atcatattct tggttggtaaa ctgtatttca atattctctg 360

gcgacatgga aatattacga aacattgtct atcgataaat acgttgccag atgagaaaca 420

antctaaact tcaagaaaca catgttgaaa acc 453

<210> 4094
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-D5
 <400> 4094

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 aaacgaactt tctggtagaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggggg ggccgcccaa 300
 aaggttcaaa gtttgtttac cctttaaggg aatgtaaaac accttcaaaa gatgccccca 360
 aatttaaaaa agcgggccat tggttaaaaa ctctggtacg gaaaa 405

<210> 4095
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-019-Q1-E1-F1
 <400> 4095

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 gaggaacct tccttttgaa gctggatttg cccatcgta ctggttcggc gtttttaggc 180
 tttgttcttt tggttatgag tttcacctgt atgaatatta ctattccacc ttacaacagt 240
 ccacagatca tcaagatttg ggcagtattc ataagcattt tgggcttttt gttgctttta 300
 tccttttctt ccatgtttta ctggatgcca aaaaatgctc ctcgaacgga cttatagatg 360
 cttatcgatg gagctttccg cgggtgaatg actttgaata ataaagttgg gttgcttcca 420
 tttattacga t 431

<210> 4096
 <211> 413
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-019-Q1-E1-G4

 <400> 4096

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 ctctattggt ttctttttct ttttcgtcca acgggaggaa aacgattact gctttgtaac 180
 caagcagcta gtcactacaa caggacaggg tttttgggaa tatgtaaata tgaaagatgg 240
 ttgtgttgtc catgtcgttg tccccaaaca caacaacagc aacattgggt acctttttat 300
 ccctattact attagtatta ctacaaagag aatcctatcg ataactggat aataacgagt 360
 aatacgaana agagacaatg gattgggtacc cgacaacgaa tattacccat act 413

<210> 4097
 <211> 460
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-019-Q1-E1-G6

 <400> 4097

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 cagctgaaca gtcatatgga tgcagaaggt gtcatggcga atattgatcc tctagcctct 180
 acagaactgg cctatgacat catccgaaag ggagttcggg atgagtcggc acactttatc 240
 caataccgag tttttgcacc tgcaaatagc atttacgatt tggttttaaa attaaagtat 300
 gacccctcca tcttgaggtt caagtttctg agacggcgac tggaggacgc tgttgatcat 360
 tctaatectt ttgaaagaat tcttccacgt cgaagcttgc caagaacaga tcttgccttt 420
 agtttggatc gggttcgtaca tgatctccat gaaaaggaac 460

<210> 4098
 <211> 75
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-G7

<400> 4098

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ctaaattcaa atgaa 75

<210> 4099

<211> 329

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-019-Q1-E1-G8

<400> 4099

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catcaatctg taggtggcaa attattgagt tcatcaggtg ctgcattact taacctcgag 120
tcgacctcaa gtgtgggtcat ggtctatgac actagtcgaa ggatgatgac aaaagtgttg 180
taacaaatca agtagccact ataacaagac aggggtttttg ggaacattgt gataagacag 240
atggatgtgt tactatgtcg aaggctctct cattcaaatt ataagcatag attagcgttt 300
tatcgcaatt acaacatact ataaatata 329

<210> 4100

<211> 352

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-019-Q1-E1-H5

<400> 4100

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agagggcgta agacgtgata cagagtagga agaaaagaga agagagctag aaaggaggta 120
aaagaagagt aaaaggacta gaagaggtag ggaattcacg aggaaggagc gtgaaggaag 180
gaggaatccc aagtaatcga ggaagaaaaa gcttcggtga aagcgtgaac ggattttgta 240
cacactgccc gtcaagttct ggaagtgtgc taggaataag caggagaagt agaagagagt 300
aggaaaagaa gaaaggaagt gaagacgtaa gacgtgaaaa aaaaaanaaa aa 352

<210> 4101
 <211> 462
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-019-Q1-E1-H6

 <400> 4101

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 taacacaatg aggagtttgg ttcagcaata tgccaatgac caacagcaat tctttaatga 120
 cttttctgag gtgtttggaa aatatatttc tagaattcat tgcaatcaaa cttccacagg 180
 accttgctcg ttggatgaca tcggtgtacc cacgtctgct gctccatcac cgcagtcggc 240
 tgttccttca ttttcggaac ctagtttcgg gcctccttct ggacctagtt ttccaacttt 300
 tgatgggtgag cctcagctc catcatcatt ttctcccttc ggaagcagca gtggacctga 360
 atttttcccg atttaaatag tacagaacca agtttagggg agtgtacaac tccaaagggg 420
 gttgggttagt aaagcccaca aaaaggtttc caagctttcg ag 462

<210> 4102
 <211> 151
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-019-Q1-E1-H7

 <400> 4102

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 aaaagggagg aagaacaaaa agataaaaag cttaaataag catgaatgaa aaggtgaaga 120
 ggtcttcgaa aatgtcacct atgggtcagt t 151

<210> 4103
 <211> 403
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-A3

 <400> 4103

 tattcattat atgatgagct ttgaacaaaa ttggaatcct attcgatgcg tatttcgatt 60

ggctattttca tggagcagac ttcaatataa ttgctggaaa caggtttcta aaggtctcaa 120
ctcatgtcta atgacagtgc aacctattct tgatcgttgt tgcccttcat cggattccag 180
taatacccaa cgattattgg aaactttggt acaggatttc atcgtggaaa caaaaaatat 240
ggatgagttt gctacaagct ggttgggtatt gacagaaaag gaaaacttag attgtattca 300
attcgatact ttcaaaggac ctttaggatt ttcaacgagt gaatttccta atgacccctt 360
tgaagacact ttattgtcga tacgtaagac tttattggag ttg 403

<210> 4104
<211> 193
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-B12

<400> 4104

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atatatgaag atgtggtgca actataatct acatacatga cagaatgcgt ttcaatggca 120
tataccgaag atacggaagt ttcaagctga ctttggtcac aataatcatt caatcaatat 180
ttgatgcaaa agc 193

<210> 4105
<211> 355
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-020-Q1-E1-B5

<400> 4105

cgactgttta gcaaaaaacac agcactctgc agaaaagaga aaatgtaaag tatagagtgt 60
gcggcccag aaaggagagg gcgtaagacg tgatacagag taggaagaaa agagaagaga 120
gctagaaaagg aggtaaaaga agagtaaaag gactagaaga ggtacggaat tcacgaggaa 180
ggagcgtgaa ggaaggagga atcccaagta atcgaggaag aaaaagcttc ggtgaaagcg 240
tgaacggatt ttgtacacac tgcccgtcaa gttctggaag tgtgctagga ataagcagga 300
gaagtagaag agagtaggaa aagaagaaag gaagtgaaga cgtaagacgt gaaaa 355

<210> 4106

<211> 234
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-C3
 <400> 4106
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 ctaatcggtc ttccgggttg gataagaaaa cgtgggatgc catacgtagt gaagtagaga 120
 tgcaagttgg ttagtctgtt gtagatgtgt tttttcgtgt gcaagtaaag gtttttttgt 180
 ttgcgtgtcg aaaaaaaaaa caaaaaaaaa aaaaaaaaaa gaaaaaaaaa taaa 234

<210> 4107
 <211> 392
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-D6
 <400> 4107
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 aagagacaag agtcgtttct ctttgttttt tgggtggcaat ggtcggtaaa aacttgtagg 120
 tggttgtggt tggtgttgcg tattatcttg gtatttcttg ttggaacctt ccaccaacta 180
 gtataagcat tgttttcatc tacaacaaca acatcaacgg taggataaaa cttacctctg 240
 taatatccga caatggagtt cgcctaggaa gcgttgtctt gtccttttta gaacttgtcc 300
 ttggtttatc tggtggtgtg caatggtcta cattttcctt ttccaattgc caccattcaa 360
 gtgattgaga agcgtgttac attgctttcc tt 392

<210> 4108
 <211> 340
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-020-Q1-E1-D8
 <400> 4108
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 ggtaggagc catctgcatg gcgattatcg gagcgtgggc ctaagaataa aatttgtttg 120

agacgtcgtg gtgcagatga ctgcgatgtt tggtagttgg ttcaagtttg acaagagaaa 180
acatttggtg ctacttctta caaataaaaa aagttcaagg acaaattgta gataaatgtt 240
gaactgtcaa agaaacattt gtaatacagt aatggggaga gtcacaggca gtgagcggag 300
atagtctcat gttagcagat ggtggggcgc aagctgtcaa 340

<210> 4109
<211> 434
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-020-Q1-E1-F10
<400> 4109

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tggctaaaat acaaaaaata agagagcaag tatggaaaga tagacaagga atagtagaga 120
aagatcctta tgcggtttct actctattag aacgacatcc tgagttgacg ttggaagaaa 180
aacaacaatt gcaatccatt gaacaaggaa tagcacctgc tactggacag tcttatgatt 240
atctttttgc cgatatattt ggtagagcgt tggaacctcc tccacctgga gtacgttctc 300
ttcgaaagcc tttaaggaag aaacccaagg aacctcattt tgaacatcac ttacaacctc 360
gtatatggga taatccattt agtgaatttc gagagtcgga agcacaagaa cgttggaaag 420
caaagttgac aaga 434

<210> 4110
<211> 210
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-020-Q1-E1-G1
<400> 4110

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aaagcaattg acgggaatcg gaaaaagggg tggatcacgt aaattaatcc gataaaccga 120
gaaccttacc tctccaagaa ggtgttgac ggctgtcgaa agaacgtgct gtgaagtgag 180
agaacgtacg agaaagccaa gtgaggaaaa 210

<210> 4111

<211> 286
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-020-Q1-E1-G6

 <400> 4111

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 aaagaaagaa gccacaagta aacctgcagc agcagatgct acaaagacga cagaaaagtc 120
 tgggtccggaa gccaaagttga agggaaactgg tgcaaagaaa caataaaaag ttgactatgc 180
 atgtgcagtc ctgttatgtt ttgtgagttc tgtttgatag tttccagcta ttcttttggg 240
 agtgaataaa gagaaaattt tttatattta aaagaganat agaaga 286

<210> 4112
 <211> 330
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-020-Q1-E1-G8

 <400> 4112

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 cgaaaccgtt cctccacgac ctgattggaa agccacttat tgtaaaactt aaatgggggc 120
 tagaatatag aggtttatta gtgtccctag attcttatat gaacttgcaa cttacacagg 180
 cagaagagtg gataaatgga aaaatggctg gaaagctagg ggatgttctt ataaggtgca 240
 acaacgtttt gtatgttaga ggaggcgaag gtgaagccaa cggagtacaa aagtgcacac 300
 aataaacttc agcacgttcc taggtaaaaa 330

<210> 4113
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-020-Q1-E1-H12

 <400> 4113

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tttatgcgaa atcaaaagcc gacagttggt ttgcaagaga caagactcaa tatcgtanga 120
 gcagtgtata ttcatccctc ggcaaaagtt gaaagcaatg ccaagattgg accaaatggt 180
 accattgctg caggtgtaga gatagctgct ggtgcaagat tgaaggattg tattatttta 240
 gaggatgtga acatcataga acatgccttt attagtcata gtattattgg ttgggggttc 300
 attgtggatg cttggactcg agtacaagga acagcggaga atccaacat atttggagca 360
 agagtagtta cagaagcaga gattgttggt cgcaattgta cagta 405

<210> 4114
 <211> 468
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-021-Q1-E1-A11
 <400> 4114

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 ctcccttgga aaatttgaaa agttcggggg gaaaatggct ggattgttca attcaggatt 120
 ttgaaatgta agatataatt ggtttatatt tacgaatgga aacgatggaa accgcctacg 180
 gctcgttttt tgattggcga tgaagtaaca caagtctatg ctgtcggagc tattcatcac 240
 gttccagaaa tgaagtcttt tggagatgta gacacgagtg ttgtattgtt acacttccga 300
 aatggagtaa ttggcactat tgacaattct cgcaaggcag tttatggcta tgaccaacga 360
 tgtgaagtat ttggttctca aggctctgtg cacatcaaca acaattatcc caattccgca 420
 gttatttcca ctagtcaaag tattatgcgt gatttaactc ttcacttt 468

<210> 4115
 <211> 427
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-021-Q1-E1-A4
 <400> 4115

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 tggttatttc tgtactggag atgtctgcgc atgggactat gacggcacac tttccatcat 180

agaccgaata caagaattta ttcaagtttag ctcaaggaga atatatttca ccgggatacc 240
 tgcaacaaca gtaagcctcc tgtaagtttg ttgaacagat gtggatttat ggcaatagcg 300
 aggaaagcga acttgctgct gtactgcatc cgaatcaaca ccaagcacac gaatgggcat 360
 aagagaatca gaaggaacga catttgaaag ctctatgcaa ggacagagac ttcaagaaag 420
 ctgtttt 427

<210> 4116
 <211> 220
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-021-Q1-E1-B3
 <400> 4116

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 gccccacaaa cccatttttaa agcgggggtcc caagcgcacg cgcagttaat ttcacaccat 120
 ttttataacc ccacgctgaa catgatgaaa gggcgggtccc aatccttttg acctgcagta 180
 aaaatttggc aaaaagagtt tccaagttac ttgtgcaaaa 220

<210> 4117
 <211> 404
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-021-Q1-E1-C10
 <400> 4117

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 cgactggcga tgaaaacgac ttggagaccg acatgggcac ttatccatcg actttatgta 120
 aaaaccacaa gtagaattgt tcatcaacca aaactggggt ttcaaacaag cccttttcaa 180
 acgtcccttt ttgtcctttc gtctgctgaa caagaacaag gcgggtcctc gaaaagtcgc 240
 cagtctcatg cttttgcctc ctttgctacc gtagcagcca ctgtatttgg taccatttat 300
 atgacgtgtc ccattttgaa agcagacgat gagactctag agcctccaaa ataccttgg 360
 aaccattctg gtcctttgtc ttccttcgat gccgctgcca ttcg 404

<210> 4118
 <211> 414
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-C9

<400> 4118

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 cttaccacgc gcggtttgca ccagactcac cttatgactt gacgacatgg agatacgaat 180
 accttttagaa gtggatacac acaccacatc ttgcaataga cgtattttatt gcaaacgttg 240
 tcccaataac taagtgttga agctctagga atcggccttc gtgcgctttt gatatcgact 300
 gcatgtactg gaacccttgg ttgtgccata tttctttatt tacctccaga atatagatca 360
 ctgaaccttc gttagcgtac gcagcacttt tctgaagatt taaggaactg gtta 414

<210> 4119
 <211> 452
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-D11

<400> 4119

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 tggtaaacta ggaaaagggtg gacgcattat ttttgataaa gttgtggata gcagtcattg 180
 aattgggaca cctgtcgacg agggaaagga aagatggctc ttatcttcgt ctaattctaa 240
 tttattgcca gatgattcag tggtgttcc ttgtgaaaag tcaaggcctt ccattctgac 300
 gccacaatcg aattctgtgg aaagcatgtc attgaagtgg cttcaaaga agaattggcaa 360
 atgttttagag aacggtagac attcctgtga agaaagagag tggagtggat attttatcgt 420
 tgcttcggaa tctggggaga aagactggaa aa 452

<210> 4120
 <211> 466
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-D9

<400> 4120

tcgacccagg cgtccgggtg gataaatgat gtaaggaata taagcatgtt agtatgctgg 60
atatggttgg aagtaatagg aggagtaaag aaggagtaca gaggaataat aagcagtata 120
ggaataataa atataccgat aataaagtac tcagtagagt ggtggaatac cttgcatcag 180
ccagtgagta taagctcatg gggaggaagt ataggaagag aagaagtaga agaaatagtg 240
aaggtaataa taataggagt aatggtgagt atagagaaga acatgaggaa gaaagaggca 300
aatacgggaa agcagtaaaa gaagaaagag aaaggaaaaa actgagtatc aggaagaaaa 360
gagggagtag atgaggaaaag aaagatcaag gaagtaagag taagagaagg agtaatgtga 420
atgaaagcac gaaagtattt gaagaagaga gtgtaaagcg cgtaac 466

<210> 4121

<211> 198

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-E10

<400> 4121

gtcgaccagg cgtccgcca cgcgtacgcc cagcgtccg ggaaaaaatg gaacaagcac 60
tgcaagcgtt gagaaaagaa ctcgagactc gagaagcttt agatgctccg aacaaagact 120
gacaacacag agtgaaaagt atttgcaaatt ttggaacaaa ataaatatct tcttgtttcc 180
accagaaaaa aaaaacaa 198

<210> 4122

<211> 440

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-F1

<400> 4122

aggtaccggt ctagaattcc cgggtcaacc aagccttcgg cggacccttg ggaaggatgt 60
cgtcttcctc gcaaaaccag cacaacaaaa agaacaaccc accaacagaa ataaacaaag 120
gtttaagaaa aagaccgca catacggaag aaactcgcaa cacagacaat gactcttcgg 180

tagaaaagcg aaccaatgct tccctatattg aatgtcatat ttgtttcgac tctcccaatg 240
accctgtagt gacaccttgt ggacacttgt attggttggtc ttgtatttac aagtggatgg 300
ttgctcatcc tgaatgtcct tctgtcctt tatgcaagtc aagtattgag aaagacaaga 360
taattcctat ttatggtaga aatgaggagg aaaaagtgga cccaagaaca aagcctgttt 420
tggataacaa tattcctgcg 440

<210> 4123
<211> 241
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-021-Q1-E1-F11

<400> 4123

tcgaccacgc gtccgaaaaa aggcagtgtc agtcttcgcg tgattattca gttccatttg 60
tcanaatcgg tataaggtca aagtctcgat aagaccgtgt cagattgtct ctcgtcattt 120
tcattcttga tgaggttatg aaaatttgtc gtgtcagtat attgtcattc aattctgaaa 180
cgcgtacctt ttgcataatg tcccagggag tgcgctctga aggatccaga cttacgtaga 240
c 241

<210> 4124
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-G12

<400> 4124

tgggaacgaa ggaggtgtat gtaccgctaa aatgttaccg accggaggta caaaacggga 60
aggcacttgt taatttatatt caaacaataa ccaaccgaga gctttttcgt ttggtaaatt 120
ttcgttccaa cataataata ttttacttta tcacagccac tttagaacta ggaaaccaca 180
gattggacct tccgaggtgt gccttcacgc gcaactcttt gtgaagcgaa agtcagcaaa 240
ttgtcatatt tgtgtactga gggcaaaaat aagtacaagt aaaagtataa aatgccccaa 300
cagtaatgaa aaggaaagtt tggcgagttt ggaggaagct tttgaaaacg ctcttcgagt 360

ggatatgggat aggaaaccaa aaggctattg gtccagtatt gaaaatctca ctaacgaact 420
cgggagattg atcgaaaagt atgattcc 448

<210> 4125
<211> 432
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-G3

<400> 4125

cccgggccga cccacgcgtc ggcccacgcg tccgcccacg cttccggcaa gaaagaaacc 60
caaagcaatt gacgggaatc ggaaaaaggg gtggatcacg taaattaatc cgatataaac 120
cgagaacctt acctctccaa gaaggtgttg cacggctgtc gaaagaacgt gctgtgaagt 180
gagagaacgt acgagaaagc caagtgagga aaagaaggca agtagagggc ggcccagaaa 240
aggagagggc gtaagacgtg atacagagta ggaagaaaag agaagagagc tagaaaggag 300
gtaaaagaag agtaaaagga ctagaagagg tacggaattc acgaggaagg agcgtgaagg 360
aaggaggaat cccaagtaat cgaggaagaa aaagcttcgg tgaaagcgtg aacggatttt 420
gtacacactg cc 432

<210> 4126
<211> 143
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-G8

<400> 4126

gttgtttcac aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagggcggaa 60
caacaataag ataaaaagca atacataaac gtgaatgcaa aaatactatc acatcaagac 120
tgtcacttca aattcaattc acg 143

<210> 4127
<211> 312
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-H1

<400> 4127

cccacgcgtc cgaagacagt gaaaaggatg ccaaaacttc ctacttgga aattatttgg 60

aacgacgcac gaagaccaga gtctactcca ttctatcttg gttacttgat cgttttgacc 120

ttttcgtggt ttgcgtttta accgaccgat gaaaactata aaaactctcc caatccgagg 180

tttgaagaa atgctgtgaa ggagtccac gattccaaac actagaaata ctttggttgt 240

tggataaagt gttatttttg ttgtaaaaa aaaaaaaaaa ataaaaaata aaaaaaaaaac 300

caaaaaaac aa 312

<210> 4128

<211> 444

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-021-Q1-E1-H3

<400> 4128

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aaaattctgg cgcagaatcg ataattacgg cctcattgcc gaattgtcga tacatcggat 120

acaacttggt cccccgtttt gtgacaagat gtcacgttgg tgaaccaaca gacaactctg 180

cttgctactg agttttcttg tcggtttgaa ccacgtttct tgttcagaag aattgaatca 240

gtatgtgtta tgtcacaacg ctcaaagaga aaacaaagcg aatctaggag tactgactcg 300

tctgaggaac aagaggctag tattgaagaa tcttttacac cacaattacc ttctcttaga 360

acactattac aaggtacgac agatattcca agaaacaaac aaagcctctc aaagagtga 420

agtgaaaaaa aatcgagtgt ttaa 444

<210> 4129

<211> 424

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-A11

<400> 4129

gtaacagtga catggagtca tgagagtatg aggagtggag agaaggagga gatggagaag 60

ggtttgatga taacgataat gttggggata atatttttga tgatacaagg atatgaatat 120

tatgaatcag agttaggat aacggatgga gtatatggga gtagttttta tatgggaacg 180
ggatttcacg ggatgcacgt gtagtgga gtaataatgt tatcgatggg attgataagg 240
agtataagag gagagttaac ggcagagcac catgtaggat tggaagcagg gatatgggat 300
tggcactttg tggatgtggg atgggttattc ttgtttgtga gtatatactg gtggggagggt 360
gtataggaag tatagggaat ggaaggagga agggataaga aggatgaagg agataggag 420
ggca 424

<210> 4130
<211> 372
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-022-Q1-E1-A7

<400> 4130

tcttcaaag agtctatcga gacgttattg ctaaagacgt ttcctaaaga aatccctact 60
tcgtattgtc tcgtgtatgc acttttggtt attccagtag tcgcgctcga cgtgtattta 120
tatcttgccg tactccactt gaactttatt gcttcaagcg ttctggtgat catcggtact 180
acagtcgggt tgggtgcttct agttacgtcg tatcataaaa ctgcatatgc caagtgggtct 240
aagctcgatc gcacaacaga gcaaccaacc aagagctctt tcaagggtaa tttgtcggca 300
tnacgaagtg gagttgagag tcacctatgg ctcttgaaa gatcctcggg cagttacagt 360
gtantgataa ac 372

<210> 4131
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-B10

<400> 4131

gaatggcggg cctaacggta aggatccaaa ggtagcgaag taaatagacg tttgaaaggc 60
gtccagtagt aaaggagaaa cgagtgtatg actgtctagt cgtccaactc agcgaaacag 120
caataactgt gaaaatgcag taaactagca gtaggacgga aagaccccat aattcttgac 180
tagatagggt tagggaggag agagaatcat gaagtagagg aggtggggta agagatgaaa 240

gaccactgca tgaggataag gaatctaact gagtaaggaa aataagctta agctagtttg 300
gctggggaag taaagcctaa gaaagagtaa attaggcaag caaaggcatg agagaagtat 360
aatagcagaa gcatgcttga agaaaaagaa agagatttca gaaagggaag aaaagtcagc 420
tatagagaac 430

<210> 4132
<211> 379
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-022-Q1-E1-B12
<400> 4132

cccacgcgtc cggttttcga tgagcttaga ggaagtattc aacaaggcag cggaagaagt 60
aaaaaaactg ttttcggcat ccaacgaaga caaactggag ctatatggtt actttaaaca 120
agccaaggag ggtgattgct ccaccgagaa accaaaaggt ctttttaatc aaaaagaaaa 180
agcaaagtgg gacgcctgga attccaaaaa aggtatttcc aaagaagaag cacagaaaaa 240
gtatategaa aaggctgatc aactatgcgg cacgcagttt cttcaaagcg tttcctagtc 300
accttaggtc cttgctcttt ttttggtttg tcggctctaa ttcccaaaaa atatgagtaa 360
agtaccgttt ttttccgcc 379

<210> 4133
<211> 235
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-022-Q1-E1-B5
<400> 4133

ctcacgcgtc agcccaggcg tctgccacg cgtccgcgga cacctggggc aaaacatcca 60
agctacgaca ggattcgggtg gtggattcag gttttccgat acaccttcct ccaccaatca 120
aggtaacact ggtgacgagg atctctattc gtacgacaac ggttcacgaa tctgtgcagt 180
ttattgatgt gtggcgtttt gttgaaataa acatttgttt agtttacaaa attgg 235

<210> 4134
<211> 368

<212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-022-Q1-E1-C8

 <400> 4134

 atgttattag gaagagaaag gagtaaggaa gtaaaggaga tgataaatgt gagtgttaagt 60
 gagagtggag tatggagtgg agagaagagg aagaggagtg taatgaagga ggagataaag 120
 ggagagaagg agataaggga gtggagttag ataaggatgg aggaggagat ggtaatgata 180
 atagcatgta tggtagtcca ttggagcaat ttgaagtgg atcgctgtat aagatggaga 240
 tagaaggaag ggaaataggg ataagtaaca taggagtgtata tataataatg ataagtgtaa 300
 aagggaaagg aaaggagaga aagaggaaaagg ggatgaaatg cagagatctc tagagaaagg 360
 caaaacac 368

<210> 4135
 <211> 108
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-022-Q1-E1-F6

 <400> 4135

 attcagatat gatagacggg aaatccgaag tagacgatat ttgggttacc tggaggactt 60
 aatcaagggt gatctagggg tccacttcca gaccttagag tgctgggt 108

<210> 4136
 <211> 298
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-022-Q1-E1-G6

 <400> 4136

 cccacgcgtc cggagagggt aggcttagaa gcagcaaacc agagaggaaa gcgttaaagc 60
 atgaaagaaa agaaatccga aaaagaagag aaaaaggtaa gaaagaggac cgaatcaggg 120
 taagaggtag aggagcaaga agagaagaga gaatgctggg tggagtagcg aaacaagaga 180
 agggaagtaa aaggtaagaa agaggaaaagg ttacgagag aaggaagtag aaagaagaga 240

gtgtaaggcg gcgtcataat agaaatccga aaggagtaga agaaaagaga gagaaatn 298

<210> 4137
 <211> 282
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-022-Q1-E1-H1
 <400> 4137

attccgaggt cgaccaggc gtccgaccac gcgtacgaac agagtggcta cagagtaagg 60
 aacagatagg gaatgtaatg gtaataagta aggtaatgta tggagaaaag atgatacgaa 120
 taatggaatg tggaatgatg ttaatgttac caatgatagc agtaataatg atgggtggaag 180
 gacaagagag aaagaacgag gatgtaaggg agcaggagtt aagaagatgg gaggaagtga 240
 taagaagaaa ggaatgagga ttcacgtaca gcacgacaac ca 282

<210> 4138
 <211> 429
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-022-Q1-E1-H11
 <400> 4138

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 tcaggtcata acaaaggaaa tggatgatgga ataacttctg tttcatttag tcctcgttct 120
 ccttagcgta ttgcaactgg ttcgttgga aagacagtga gagtattcga tgtagagacc 180
 ggtgaacttt tgcacaattt tcgtcaacat gcagattctg tatattctgt tgccttttcg 240
 agcgatggaa gatattctgt atcagggttca cttgataaga atgttatatt atgggatctt 300
 gcagctcctt ctccaaatga ctagtcaatt ttcaaaggcc atactgactt tgttttgtct 360
 gtcgcattta gcttaaaccg tcgtcttccc ttgagtggca ccaaagaccg ttacggtaac 420
 tttctggga 429

<210> 4139
 <211> 284
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-022-Q1-E1-H6
 <400> 4139
 acggtcaaga attccccgggt cgacaaacgc gtccaagcaa agcgagggtgc aaattttacat 60
 tcatcaccgc atacatcagt aaacgataga agcattttcat cacaatcgga tgcattggtac 120
 tgactgaata cagatgtttct cgtaagaatc gtggaatcat tcaaagagac tcgaaacgaa 180
 atcaagggca tttcagagta tacgaaccag cggaaataga aaaaattaag gatctagaat 240
 gtattaggaa atgctatcga ctaaattgcgt ggcagtgcac atgg 284

<210> 4140
 <211> 202
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-A1
 <400> 4140
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 agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagaaaa 120
 aaaaaaaaaa aaaaaaaggg gggaagcgtc aaaaaaagag aagtgaggaa tgaggaaaag 180
 taagggaag ggagccaaaa ag 202

<210> 4141
 <211> 327
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-A12
 <400> 4141
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 tctctcaaga cgtcgagatg tctcgttggc atttctgcaa tgcaaggcat ttctagtatt 120
 tgaacttggt gagatgtttc gaatggtgaa tgagagtcaa atgttagtgt ccaaccccat 180
 tgacgcaata tttccttgta tcggttttca tattgtactc gtcctcagc tgcattgtga 240
 tccatagcat atagcgtttt atctgcccac aacagtaaaa aacttctgtt ccagactcct 300
 ttccattgca ttttgtcgaa aatatct 327

<210> 4142
 <211> 390
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-A2

<400> 4142

tacctctcca acaaggtggt gcacggctgt cgaaagaacg tgctgtgaag tgagagaacg 60
 tacgagaaag ccaagtgagg aaaagaaggc aagtagaggg cggcccgaga aaggagaggg 120
 cgtaagacgt gatacagagt aggaagaaaa gagaagagag ctagaaagga ggtaaaagaa 180
 gagtaattgg aactgagaaa aggtccaaac aagagaaatc agcagtgggg aaaattgggc 240
 aatgtacagg gaagtatgac ccagtaatga ggagtggagt aaacagaaaa ggaagtaaaa 300
 ggaggggaatg aagggaagtt atggcaaaaa cacgtgccag cagcagcggg aaaacgtgtg 360
 taacaagcgt agagcagaag aactgggtgt 390

<210> 4143
 <211> 362
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-A5

<400> 4143

gaaataaagc acgaaacagg ttttatttcg tcgcactgaa gaactcacia actcagtgtg 60
 gagaatccaa tttgtttcca tcacacgaaa atttcagact ctccaaactc tgcattggga 120
 tcgaagccac caaaggcagg ctgctcatta aaagaaggcc atgatggata ggatggatat 180
 tgaggaaatt ccacatagga tgtgtaagaa ggagcgtaaa aatagctagg cgaaggatat 240
 ccctttgagt aatctgcaaa gtctacttga gctgcttttc cattgtcctt tgatgaggca 300
 ctactagtta cttctaactt ggggatcttg gttgtacctg gaataacaga ggcgttgcct 360
 ga 362

<210> 4144
 <211> 419
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-023-Q1-E1-B12

<400> 4144

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 aaaggaaaca acaaggtcaa aagccaaaac tttgccaaat ttccaaacaa acttataccc 120
 aacctcaatc ttaaattccaa cccccaacct agggcaaagc tccttcctac aatcaatatt 180
 cttcttcgta cggttcctct agctatcgtc tcttaactgc agacgaaaac caacttgtga 240
 gcagaggagg ttatgcacca acaagccaat gtattctagt tcctatccaa tgctgcactg 300
 attgcaaaca atgctatgcc gcatggagtt cctaaatact gatacagtgc tcggctagaa 360
 agaaacagat atcaacggat gtttttttcc tttacgtgaa taanacttgt gttcataac 419

<210> 4145
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-B6

<400> 4145

gcaacaccga ctgttttagca aaaacacagc actctgcaga aaagagaaaa tgtaaagtat 60
 agagtgtgcg gcctgccaaa tagtagagaa gaaatcgatg aaagtgaaag cgagtaaaag 120
 atgaggtata gagaatggcg gtcctaactg taaggatcca aaggtagcga agtaaataga 180
 cgtttgaaag gcgccagta tgaaaggaga aacgagtgtg gcactgtcta gtcgtcgaac 240
 tcagcgaaac agcaataact gtgaaaatgc agtaaactag cagtaggacg gaaagacccc 300
 ataattcttg actagatacg tttagggagg agagagaatc atgaagtaga ggacgtgggg 360
 taagagatga aagaccactg catgaggata aggaatctaa ctgagtaagg aaaataagct 420
 taagctagtt tggctgggga 440

<210> 4146
 <211> 396
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-C10

<400> 4146

gtccagaatc acgggtcgac gcacgcgtcc gcccacgcgt cgcgccacgc gtccgcccac 60
 gcgtccgccc acgcgtccgg aaaaggagtt gtctagtgc aaggaagaag gtttgagtac 120
 cgacataaag aaagttggtc aaaagtgggg acgaaatgca aaaggtgaac gttggtatga 180
 aacttggaag gtaaagaata atggaaaggt tgaaactacg tatcgtttag aaagagccaa 240
 ttctggcagt tgttgaacat aggaacttgg cagctgtggt gtagtaattt tgaaaatagc 300
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 atacaaaaaa catccaaatc ccggcaccaa ccctac 396

<210> 4147
 <211> 393
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-023-Q1-E1-C3
 <400> 4147

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 ggtactccaa agttacgagg tgctgatgga gagttttctt ttcgttcagg aatggtggaa 120
 tggaaaatag ctcttgtgga taaggataat cctcaagggc ccttgaggat tgtaacagaa 180
 cctactcctg ctactagttt ctccctgta caagtgtcct ttacgagtag tgaaatatat 240
 ggaaagattg gaatagaatc cgtgaaagat tcgtccgacg aatctcctca caagttttct 300
 ttggagaaat gtttgactac cgaacgatat tccattgtac atgactgaca gtacagtaaa 360
 aagttgatat gatgtataac aagcgtaaaa cag 393

<210> 4148
 <211> 393
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-023-Q1-E1-C4
 <400> 4148

ataccgggt caaccacgc gtccgtgacg ttcccatcg tttgcttata caggatgatc 60
 cttcttacag atataatgct ctcatattcg tcaatggttg gatgctgggg cactacatca 120
 attacttagg accacaacat gactttgtac ttcataatgg aattctgaat cccaatggaa 180

agaatgatat agccatagca gtttggggac aagacattgc tggaggaaga cttggaaacg 240
 tgteccctgca tgcgtatcaa gttttaagga cggaaccag aataactgaa attaatgaca 300
 gtccaaacta ctggcaaatt cttcctcgtc tagaggagct atgttgagtg tttcccgat 360
 cgatgtttga tgttgatttg ttcgttcata taa 393

<210> 4149
 <211> 445
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-023-Q1-E1-D10
 <400> 4149

ccggtctaga attaccgggt cgacgcacgc gtccgtactg atatacttta gacatgtaaa 60
 tactatcgggt cctcttaaga cttggctact ctttggagac gcaagtattc atatccaaaa 120
 cctggagggtt catttcgtac tctttcatgt cctgtcgttg tagttgttac tggcaaccga 180
 tcttcaagat gcgaactttc cagagactct tgtgagctgt ggacggaaga acgaaacgtg 240
 cgtttttgta atatcgttgg gtccttttcc acacggctctg tgggtttctt ggatgactct 300
 acaatacttt tcgatgttct gctattagag tgatgatcca cgctggtggt ttgtggatgt 360
 cgacgatcca ttggctcagg aaaacttttt cgcactttct ttgataggat cttcgtacgc 420
 attctctcgt gggtgtttcc caacg 445

<210> 4150
 <211> 321
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-023-Q1-E1-D9
 <400> 4150

ggccaaacgt ccggagcgtc cctccgctgg ctggctgcag gcaaatattc gattcaaagt 60
 atggaagctg gagaaggaga tattactgtt agtcaactag taaaggaact gttgaagcga 120
 gaatggagca acgagcaata cagacagatg aacaaaaggt ttttgcgcaa tcttggcatt 180
 tttgcaacag caatttttgt ttttagaaag tatggagaat tatttgctat ttgaaagata 240
 aatattatcg tgagaaagaa ataaacgctg ctctaagtg cctattggac tgaaaaaaaa 300

caaaaaaaaaa tggaaaaaat a

321

<210> 4151
<211> 447
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-G10

<400> 4151

tcagaattca cgggtcgacg cacgcgtccg aagaaacctt tatatgtctg tttagcacag 60
agaaaagaaa ttcgacaagc tcagttggaa gcacaacgta tagctgctgc tgctggaggt 120
ttaagaattc ctggagcagt tcctgggtcc ttgtatcccc aaccaggagc tccaatgttt 180
tattctcaac caggcgtacc acctcaaatg caacttcaat caaatatgat gggaagagga 240
caagcttcgt ttattaaccc gcaatatttg gcaatgatgg gtcaaggagg aggaggagga 300
gcagccgcag cagcagcagc agctgctggc cctgccgcta caggaggagc ggcaatgggt 360
tcgatgaatc aaaactttat aggaagagga actgcagtca tgtccagtcc tggcgggtgg 420
ggaagaactt cgtatcctgc agcttct 447

<210> 4152
<211> 424
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-G8

<400> 4152

cgaccacac gtccgccac gcgtccgcc acgcgtccgc ggacgcgtgg gcggacgcgt 60
gggcacttgt tgaggtagtt acacagcatg tgggatgggt gtttcaacct gtcttgaacc 120
cttgacagta aaaagacgaa ttggaagcaa gctataacct ttaccagaca gtggagtcaa 180
ctcagtgaat gcaagcacia taatatgcga cgattactct gttttacttg ccttggtcag 240
tcgacattat ccgacaacta cggttatttt gagcaaggta tgatgcaaag cctcgtggaa 300
atgtgtttaa aaatcaaatt cgtgtagaac acaattattt tcaacaagt ccgaccaagt 360
ggaaggaatt ggtaaaagat gttcatcggt gggttggtta tgcttgata cctggaaaga 420
aacc 424

<210> 4153
 <211> 404
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-023-Q1-E1-H12

 <400> 4153

 tcacgcgtcg aaacactgca ctggcattat tcgactcgct cagcagttac ctgtgggtga 60
 tgtagaagcg gtcaatttgt tagaagaaaa acagtgtcaa tcttctgcgg attattctgt 120
 tccagttttc agaagtcggg atcatgtccg agtctcccta agaccgtttc aaattgtctc 180
 tcttcaattt cagcttggtt gaagttatca aaatttggtt tttcagtaaa ttgtctttca 240
 tttcggaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
 aaaaaaaaaa taaaaaaaaa aaaagaaaaa aaaaacaaaa agataaaaaac ttaaaataaa 360
 aaatacaaac aaaaacataa aaaaaaaaagg ggggggcccc ccaa 404

<210> 4154
 <211> 386
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-023-Q1-E1-H4

 <400> 4154

 gggtcgacgt acgggatttta cgtcggggca tttcaaaagc tcaacctaaa caaccaacat 60
 ctgaccaaga caacgcttca aaagccaaaa aagccgaaaa acctgcagga atgattcctt 120
 ctgcacaaaa agattccaag gccgttgaat ggagcaatag tgaaacaacg tcaaaagagc 180
 gtgaaattga aaaaccttta aactgtcctt gtattcacia aattaaagga aggttcctgt 240
 ggtgagcagt ttatcgcagc atatcgctgt tttcttgaaa gtgaaacaga gcccaaaagt 300
 tccgaatgtg ttgaataatt ttcacgatg caaaagtttt atgtaaaaca ccgggagagt 360
 atgacttga tagtgattcc gatgac 386

<210> 4155
 <211> 134
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-H5

<400> 4155

gggaaaaagc ccagaagcca agataaggta tcaaagtaaa gaaagaagga aaaggagaag 60
aagagagggt aggcttagaa gcagcaaacc agagaggaaa gcgttaaagc atgaaagaaa 120
agaaatccga aaaa 134

<210> 4156

<211> 410

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-H6

<400> 4156

cccgggtcga ccacgacgt ccgggataag aatagttcct atcataaagc tggagaagaa 60
gaagaagaag aagaaggaag aaagagaacg gaccagcagc aacaatccaa ttcggattgg 120
gacctcattt acggaattga acaagtggac ttgcgaccac cggcagcaga ctgacaagaa 180
gtaaaacagc aaccaagtt ggagttttta caaggatgga aaaggacaac gataacagct 240
ggaacgtcga ggataaagac tcggtggagt tgttcttaga tgcagctcgt tttggtgacc 300
tttccctagt tgttgatttg tattctcagt attccaataa acgtgtgttg gaaggcaaaa 360
acaacgatag cccaatcaca acaaattacg caacctgaat ggcaaatggg 410

<210> 4157

<211> 361

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-H8

<400> 4157

acgagtccga tttcttttgg gtgtgaagag ttgcgcaaaa gagagaaaga gagagaaatg 60
gcaacgacga gtggaagagg aggaggaagt ggcggtggtc ttaccggacc tccaaaacca 120
ccacctcacg cagcaataca agatggacct cctcctggtg gttatccacc ggtggatgtt 180
cgtagaaact tgcccaaagt tgggccttcc ggtactactt tgttgatagg catcgactg 240
atcaccatct atgggttttg gggagcgacc aaatcagctc aacgtagaag aagactgaac 300

caggaaaagt atcaaattcg attggctatt acgccgtatt tacaagccga acaagaccgt 360
t 361

<210> 4158
<211> 421
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-023-Q1-E1-H9

<400> 4158

gcgtccgttt gtacacgtcg ttgtggccct tctcccaagt ggcccttttt ggtgcacaat 60
ctgttatgca cccaaagaaa ctagagcttt tacaaaagag tctagagtac gtaccaagtt 120
gtggatttac agtggatgcc gtgagaaagg cagtagaaag tcttggttta tcaaaggcag 180
caactggttt attggaacga ggactcgtgg agttggttga atttcatcat tcggttgcag 240
ataaagaggc tgcagattat gcacatcaaa tagcggacaa cgacttggaaggaaagacg 300
tgatcattgc agcgctacaa agaagatttc agtgtagcga ggattttcag tcccactggc 360
cgcaagctat ggcggttgga cacttgccac aaaactggcc ggccgctaca aggcgtttgt 420
t 421

<210> 4159
<211> 418
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-A3

<400> 4159

gggtccaggg gtcgagggtc gactcacgcg tccgccacg cgtccgcgga cgcgtgggtg 60
caagttgggt gggttctgga ctttaaggca tctctgttct cttgttggtg tgactgttg 120
tagatattgt gaaagatggg agtcaaagtt ggtattaatg gggttgaggag aattggaagg 180
ctagttctta gagctgcttt ggagaaacag tctgtagatg tggtagctat caacgatccc 240
tttattgatt tggactatat ggtctacatg ttcaaatatg actctgtgca cggcgcttat 300
ccaggtacag tggtagcaaa gaatggaaaa cttgtcgtgg atggacacga aatggcagtg 360
tttgccttcc gtgaccctag tgagattcct tggctcctta ctggagcaga atatattg 418

<210> 4160
 <211> 445
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-024-Q1-E1-A6

 <400> 4160

ggtcagaatt accgggtcga gccacgcgtc cgcgtaaacc ggacgattgg gatgatgaag 60
 aagacggaga gtgggaacct ccaatgatac caaatcccaa gtgtgaagaa gtgggttgtg 120
 gagaatggaa accacctatg attcctaacc ctcgttacag agggaagtgg aaggcacctc 180
 tcatcgataa tcccaactac aagggtccat ggaagccaag aaagattccc aatccagact 240
 actatgaaga tctacacca tctattcagc caatcggtgc tattgccatt gaaatttggg 300
 ctatgaatca aggatttgtc ttgataact ttttggttga ttttgacca gaaaacgctg 360
 ccaagtttgc aaaggaaact ttcgaggtaa aacacaagca tgaagtatct gcagaagaaa 420
 aggagttgaa gcgactttcc acaaa 445

<210> 4161
 <211> 382
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-024-Q1-E1-B2

 <400> 4161

cacttatgac gatatcaagg caacgatgaa agctgcgtca gaaagcaaag ctttaaaggg 60
 aatattggca tataccgaag atatggtagt ttctactgac tttgttcaca atagtcattc 120
 ttcgatattt gatgcgaatg ctggaattat gttgtcggaa acttttgtga agctgattgc 180
 ttggtatgat aatgagtggg gctactccaa tcgtgttgta gatttgggtgc accatatggc 240
 gaaagttgat ggtgtagctt aactctgctt ttcttgttgt tttttcgtgt attgtttgtt 300
 ttgtgaaaga gatgaaatgt gttgtctttt ccataaaaag ttgtgtgcgc tgtgaaaaaa 360
 aattgaaaaa aaaaaaaagg aa 382

<210> 4162
 <211> 475

<212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-B5

<400> 4162

caggtgccgg tcaggaattc acgggtcgac gcacgcgtcc gccacgcgt ccgcccacgc 60
 gtccggttac tggaaatctg tttggagata tattatctga tgaagcttct atgttggttg 120
 gttcttttagg aatgttacca tctgcttctt taggagaagg caatcgtcca ggagtatttg 180
 aacctgttca tggttcagct cctgatattg ctggtcagga caaagccaat ccactagctt 240
 gtatcttata tgctgccatg atgtgaagt atcagtttca gttggatgaa gcatctcatg 300
 ctgtggaaca agctgtttac cgagtttttag acgaaggata tcgcactttg gatattatgt 360
 ctccaggaaa gactttgggtt ggttgtaagc aaatgggaga acacgtattg aaacacttgc 420
 aaagcgtttc aaacatggcg actagtgtg ctactagtat tctacaaaa catta 475

<210> 4163
 <211> 255
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-C5

<400> 4163

agtaaaaggt aagaaagagg aaaggtttac gagagaagga agtagaaaga agagagtgtg 60
 aggcggcgtc ataataaaaa tccgaaagga gtagaagaaa agagagagaa gaaagaaaag 120
 aagagaaaaa gcccagaagc caagataagg tatcaaagta aagaaagaag gaaaaggaga 180
 agaagagagg gtaggcttag aagcagcaaa ccagagagga aagcgtaaaa gcatgaaaga 240
 aaagaaatcc gaaaa 255

<210> 4164
 <211> 432
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-024-Q1-E1-C8

<400> 4164

gggccaaccc acgcgtccgg taccgtacaa gcgttcagaa gaagaaaaat ggagccaagc 60
 aggtgaaaaa agatggcagt tattcaaaag actggaaaaa gagaatgcta ctgcccgttt 120
 tttcttaciaa aacaaagcta tttttccagg tgctagagtt ttggaactgg cttgtgggtc 180
 cggagaaaacc actttgcaag tagctgcgaa agtaagaggc tattctgtac cttcaggaga 240
 gaccacgggg gaagtgggtg ataaattgtt ggatatatta cgtccatctt atcaccagga 300
 agggaaactg gatggtgcca gcaatagtgg ttcggtagta ggtgtagata tcgccaaagg 360
 aatgctgaat gtgttcagag gcangttgga aaatactgtt ttgaaagatc acgtgcaact 420
 tgtanaaagt ga 432

<210> 4165
 <211> 386
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-024-Q1-E1-C9
 <400> 4165

gaaaaaaaga accaaaaagt tcaaacgttt ccagtcggat aggtttaaaa gagtcaagga 60
 aagctggagg aaaccaaagg gaatcgactg cagagtgcgt aggcgggttca agggttctac 120
 tttgatgccc aagatcgggt atgggacaga taagagaacg agacacttgt tgccaaacgg 180
 tttctacaag tttgtagtaa ataatgtgaa agaattggac gctctactta tgttgaaccg 240
 caaatatgca gcagaaatag cgcacggagt atccgcaaag aagaggaagg aaattttgga 300
 acgagcggcg gagttggata tcagagttac caacgcacgt ggaaagtga gagctcagga 360
 agctgaataa aaatcgtcta tttact 386

<210> 4166
 <211> 486
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-024-Q1-E1-D5
 <400> 4166

cgctgcaggt gccggtctag aattcacggg tcgacgcacg cgtccgtgat agcccttttt 60
 tctcttaatt gttttttctc tagttcagct gtccttgta agtactttat tgttaccag 120

gttcaatatg cccaaagctg cgagtaagga agagaagccc gcctcaaaac ggcgtgtatc 180
cccctacaac gaatatatga agaagatgct tcccgtcata aagcaacaaa accccaatct 240
ttcgcacag gaagctttta agcgttggtg tgaaagttgg aaagacgctc cagagaatcc 300
aaagaaccag gcttcagcct aagttagggg tttctttga attgggtgtt ctcaacacca 360
ccaggagaag gaactagtct attttataat tccctttgtg tcttcaagca cggaatatga 420
ggagaggtaa acttttgtct tatttggtcc gtatgagtag ttgcgtgtt gttacataaa 480
atcact 486

<210> 4167
<211> 452
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-024-Q1-E1-D7
<400> 4167

aggtaccggt ccagaattcc cgggggaaga caaaaatttt atggaaaagt ttcaaaaact 60
ggagaagatc ggtgaaggca cttatggagt tgtatacaaa gcaaaagaca aatatacagg 120
agaactcggt gcactgaaga agataaggct ggaacacgag gaagaaggag taccttctac 180
agcaattcgc gaaatttcca tattgaagga attgcaacat ccaaacattg tgaggtaagc 240
atggagtgat gagagttctt tgagtatatt cgttgttcag acttcgagat gtgatccacc 300
tggaactcaa actatatctg gtgttcgagt atctggaaca agatttgaag cattttatgg 360
atagtttacc ccctggaaag ctagaccctc ttctaataca atcttatttg tatcagcttc 420
tgaatggttt ggcgtattgt cagcaaacc gt 452

<210> 4168
<211> 356
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-024-Q1-E1-E11
<400> 4168

gttcagcact acgtagactc caaagtggtt tcttattacg ggtttgaagc ctggtggaag 60
tgggtagctg atgggtgtcc acctcgtcct tccaaagagg aagtcgctaa aaggacacgc 120

cagtctgggc agtttggtcg aaaggaccaa ccaagctcac aagacctttc agcttggagg 180
tctatgggag aaacttatta tcctgagcga aagagtcaag aacattaga cgctgaagaa 240
cttcaacaaa ggaagagcat gaataagtcg agttcggaac gaccaaaga aaatgttgca 300
gctgcatcat agttgagttt gtttctatca taaacttatt attcaacgtg aaaaat 356

<210> 4169
<211> 421
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-024-Q1-E1-F10
<400> 4169

accgacacag gtactcgagg agaaaggaga cccaaattaa ggtgagagaa tggacgataa 60
ggaactaggc aaaaggatat ggtatctgcg gtagaacata tgaaagaagc agcaccgact 120
gtttagcaaa aacacagcac tctgcagaaa agagaaaatg taaagtatag agtgtgcggc 180
ctgccaaata gtagagaaga aatcgatgaa agtgaaagcg agtaaaagat gaggtataga 240
gaatggcggt cctaacggtg aggatccaaa ggtagcgaag taaatagacg tttgaaaggc 300
gtccagtatg aaaggagaaa cgagtgtagc actgtctagt cgtccaactc agcgaaacag 360
caataactgt gaaaatgcag taaactagca gtangacgga aagaccccat aattcttgac 420
t 421

<210> 4170
<211> 381
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-024-Q1-E1-F12
<400> 4170

ggtaccgggc cagaattccc gggccgaccc acgcgtcaag gaaaggagag aaagaggaaa 60
gggatgaaat gcagagatct cttagagaaag gcaagaaaga aaagaaagga agacacagta 120
aatgaggcga gaaagcatag gaagtgaac ggattaggaa cccgtgtagt ctatgcagta 180
aaagaaagaa tgagtaagaa aaaaggaggt cattccacca ggggagtaaa ggcgcaagaa 240
agaaacccaa agcaattgac gggaatcgga aaaaggggtg gatcacgtaa attaatccga 300

tataaaccga gaaccttacc tctccaagaa ggtgttgac ggctgtcgaa agaacgtgct 360
gtaaagaatg gaacaagaac g 381

<210> 4171
<211> 264
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-F2

<400> 4171

cccacaagca actcgagaag acataactaac tcacctacaa ggagcattta agggtaagcg 60
aaatcgtgga cagttacgga aaaaatatga aagttacgag aaatccggta aattacctgc 120
aggtgcacct agaacaaaga caaacttgta aaagtgaatt tcgattttac tatgcttctc 180
ttttggaaat acaacataat tgtgtgaaag taactttagc aataaagaaa tcgagttgtg 240
tggaaaaaaaa aaaaaaaaaa aaca 264

<210> 4172
<211> 482
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-F6

<400> 4172

aggtaccggt cgagaattcc cgggccgacc aacgcttcgg cttcggctgc aggtggaata 60
gacttttctt taaaccctcg atggaaacca tgtgtcagc tataaagaat tccttttctt 120
gataccgatg atgatgttca ttccagtttg gacgacgatg aacgtcaatc acttcgtgcc 180
aactttttac cccccgcatt cgcacccatc caacttgag cacacgacga taacagtgca 240
gatgactggc aagtgaaga attgaccgct tctagtccag tgttgaccaa tcatccccac 300
ataaagccca gtcatttgtt ggttgcttca gaggaaccc acaaactgcg cagaaagttg 360
ttgatagggtg ccaaagtagt gattgtgcaa gctggatatt caggaaagcg ttttatacat 420
gaaagactga aacaattggg agttgaactg attattcagg actggacata cagttgggca 480
cc 482

<210> 4173
 <211> 377
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-024-Q1-E1-F9

 <400> 4173

 ggatggaatg ttttcatttt ctaggtttca atattttggt tttatcccag tctatctggt 60
 tcctgccgaa gcattttccaa ctogaattcg tgcgactatg tatggcatct cttctgctct 120
 tggcaaaatg ggtggaattg taggcacgac aacttttcct agtatttggc tgcgatggtc 180
 tggaggagtt tccaaaacca acgagggact tcgaaagacg atgtgggttt atggtggtat 240
 ggaatatttg gcattcatca tttgtacgct gtttgttcct gaatattctc atcgttctct 300
 tattggagaa gatacccggt ttgttgagtt gagaaggaga cattgtgctc gttttgctct 360
 acgttgaat gtcacct 377

<210> 4174
 <211> 451
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-024-Q1-E1-G10

 <400> 4174

 aggtaccggt caggaattcc cgggctctca atgaaggaag gattggaata agtgctcaga 60
 tgactggttt ggctcaagggt gctttgaata ttatctttcc ctatttgcac gaaaggaagc 120
 agtttggaac gcgcattgga gactttcaag gtgttcagtt tcaatatgca gaagccatgg 180
 tcaagttgga agcagctcgt gccttggtat acaatgcctg tcgaaggaat gatgcaggct 240
 ttgatattaa aaaggaagct gctattgcga aatatttttag tgctcaagca gcggaatgga 300
 tagcctcgaa aagcatcgat tgggctggag gtatgggctt tgtgaaggag tttggtttgg 360
 aaaagtatta tagagacacc aaaattgggtc acatttatga aggaaccgat aatatgcaat 420
 taaaaacgat agcaaaagag atgcaaaagg a 451

<210> 4175
 <211> 461
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-024-Q1-E1-H3

<400> 4175

aattcccggg ccgacccacg cgtccatgaa tataatggaa ggagaatggt aatgtatgga 60
 gtaataggag taatgataat gatgacgtta agaggggaagg gagtaatggg agtacatgta 120
 ggaatgtcat ggtagggat aagtagtgta ataataatgg gaataatggg aatgataaat 180
 gtggttaagta ggtcatataa aagcatggag tatatggaga ggataagaga agagagtagg 240
 gtgtatgtag gaatgagtat aataacagga atgatatgga gtaaagaagt gtggggatca 300
 tgggtgataa atgatgtaag gaataaagc atgttagtat gctggatatg gttggaagta 360
 atacgaggag taaagaagga gtacagagga ataataagca gtataggaat aataaatata 420
 ccgataataa agtactcagt anagtgggtgg aataccttgc a 461

<210> 4176

<211> 399

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-024-Q1-E1-H4

<400> 4176

cgggtcgacc acgcgtccat ttggttggtt tcttggtagg aattgtagat tccccatggg 60
 caaaaaacct aattttaaac ccaaagggga aaattccttg ccctgggaaa ttccaaattg 120
 ctttggaatt gaaaaatacc acctataaat acaggggttaa caccttggtg aaaaacggag 180
 gtaaccattg ggaatcggat tatgaaaaac tcaacccaat tcacactgtg ccaactttgg 240
 ccttggaagg tcaaacaatt gggcattcat ttgccattat ggagtacttg gaaaagaccc 300
 ggccacaatt gcccttggtt ccaaaggacc cggctcagcg agcaaaaagtt cgtcaggtan 360
 tanaaacagt aatgcggat acacaaccac tgcaaaatt 399

<210> 4177

<211> 449

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-024-Q1-E1-H5

<400> 4177

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tgctgggtgg agtagcgaaa caagagaagg gaagtaaaag gtaagaaaga ggaaagggtt 120
acgagagaag gaagtanaaa gaagagagtg taaggcggcg tcataataga aatccgaaag 180
gagtagaaga aaagagagag aagaaagaaa agaagagaaa agccgtactg aagaccgaca 240
cagggtactcg aggagaaagg agacccaaat taagggtgaga gaatggacga taaggaaacta 300
ngcaaaagga tatggtatct gcggtagaac atatgaaaga agcagcaccg actgttttagc 360
aaaaacacag cactctgcag aaaagagaaa atgtaaagta tagagtgtgc ggcttgccaa 420
atagtagaga agaaatcgat gaaagtgaa 449

<210> 4178

<211> 295

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-024-Q1-E1-H8

<400> 4178

tcttgggagc agttgtacat tcaacatcat caaatgccaa agggaggaaa gaaagattct 60
tcaaagaaag aagccacaag taaacctgca gcagcagatg ctacaaagac gacagaaaag 120
tctggtccgg aagccaagtt gaagggaact ggtgcaaaga aacaataaaa agttgactat 180
gcatgtgcag tcctgttatg ttttgtgagt tctgtttgat agtttccagc tattcttttg 240
gtagtgaata aagagaaaat tttttatatt taaaaaaaag gaaataaaag gaggg 295

<210> 4179

<211> 346

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-A7

<400> 4179

tacaacaccc tatagtgagt cgtattaatg acgcatgtcg gaagtgttgt gagcagagaa 60
agatttgaaa cgcgcccttg agttggatcc ttccaatgta gcattgaaga aaaagatgcg 120

cgaacttcgc caagttaagg ccgaacaaga tgcaaaggat cgcaggttat ttggaaatac 180
 gtgtgcacgt ttaggacaaa ttgaagacga tattcataag aatcaaacg aagaaaccaa 240
 ggccaaagaa atcactgcct ctgaatgagc tcaacttttt ttacttgcag ttaccataga 300
 aagaggatct aacatgttgt tttagtttta caacagacaa gagacc 346

<210> 4180
 <211> 425
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-026-Q1-E1-A9
 <400> 4180

acaataccct agagtgagtc gtatgaatat cgtgtgaagc tcgacagcgt ctctacacaa 60
 acacgcaagg tttcttggcg ggaaatactt gcgactacta gggtcgttac tttaaagaga 120
 aatgtgagag cactggtcaa gtttttagtgg acttgtgagg gtattgctta tgagagccaa 180
 cctgtggtgt cagttgttta tctggcggtta gaggaagacg tgtgaaagga gagctttcct 240
 ttatcggaca aggcagttgt accgaaaaaa cacttgtgac aacctgactc gattttactg 300
 atagatatcc cgttcggttg tttttgtatt gctcgtcaag tcttgaacag agctgggttt 360
 tatattttga tgacaaacag gacgagtttc ttgggttttg aagtaacttt tccgtctcca 420
 aaact 425

<210> 4181
 <211> 417
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-026-Q1-E1-B10
 <400> 4181

caatatccct atagtgagtc gtattatatg ccaactcgat taaaacacag tagaaagaag 60
 agaggacacg tttctgcagg tcatggaaga gtaggaaagc acaggaaaca ccctggagga 120
 cgaggaaacg caggtggcca acatcaccat cgaactttat ttgacaagta tcatcccggc 180
 tattttggaa aattgggtat gcgatggttc catttgcaaa gaaatacact ttattgtcct 240
 attatcaacg tcgatcgact gtggtcactt gtacctgaaa aagagagaga gcaaccgata 300

aagaaagatc aagcaatagt agtggatgta gtgaagcacg gtttttataa agtgttgggg 360
aaaggcaagt taccgcgaca accgttgata gtgaaagcca gattcttttc gaaatta 417

<210> 4182
<211> 377
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-026-Q1-E1-B12
<400> 4182

caatactcta taatgagtcg tattaacgcy tccgccacg cgtccggaga ctactcatt 60
ttctctttgt tttgtctttt gtagctgttt tctcgtagc tcatgcagtt cccgttggag 120
aagatgcatt cagtttcagt cagacttttg gaaatgcttc tgcttcaggc aacgcctctg 180
ttattccagc tacaaccaag atccccaagt tagaagtaac tagtagtgcc tcatcaaagg 240
acaatggaaa agcagctcaa gtagactttg cagattactc aaagggatat ccttcgccta 300
gctattttta cgctccttcc tacacatcct atgtggaatt tcttcaatat ccatacctaac 360
catcatgggc ttccttt 377

<210> 4183
<211> 130
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-026-Q1-E1-B5
<400> 4183

tatagtgagt cgtattatna ttaataaaaa aaaaaaata taagtaaaca aaaaaataa 60
aaaaaaaaaa aaaaaaaaaa aaaactatta aaataaaaca aaaaaatact aatgggaagg 120
gggttcgggt 130

<210> 4184
<211> 437
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-026-Q1-E1-B7
<400> 4184

acaataacct atagtgagtc gtattacgac gctagttttt tgtgtttctca ttcgatggat 60
aatacgatac gtatttggga tgttcgtcct ttctttcaag gttctgatga ggaacgttgt 120
ctaactattc taagaggtgc ttcccattct ttcgaacgta acttggtgcg gtgtcgTTTT 180
tcttcagatg ggactcttgt cgggtgcagga agtgcgata agtttgata tatttgggac 240
gtggatagtg gagagttgca atatgcttta cctggtcacg atggtagcgt caatgacttg 300
gctttccatc ccaaagagtc tcttattgca agtgcaagta gcgataaaac tatttatatt 360
ggagaaatac aaaagactga ataagttaaa attcgtattc acaatattat ctataaatat 420
aggaaaatga agcaacg 437

<210> 4185
<211> 370
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-026-Q1-E1-C7
<400> 4185

ctatagtgag tcgtattaac gcgtgggggc cgcctctcgt cgacggcctg acgagcatgg 60
cagcagcggg agatctactt tctagaggca cagcgatgtg tgacaagtgg aaaatgaaga 120
gaatcacgac gcttgaggcg caagagaaga tggatgagac agcgttccaa gtatcggagg 180
aattcctcgg acgtctgatt tgaggagagt tcctaaaacg tggatgagct ctttgtgcaa 240
ctctggcgca gtgagtatac cctgctacgg aagggtggaa ttgtttccga ggattgttcg 300
caagttatga tataaggttc ttgtggTTTT tgttttcacc ttggaaaact cagtctagag 360
aggaaagagg 370

<210> 4186
<211> 312
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-026-Q1-E1-D10
<400> 4186

acgcgtccgt aaggatgttt tcttggtagc agttgtacat tcaacatcat caaatgcaa 60
agggaggaaa gaaagattct tcaaagaaag aagccacaag taaacctgca gcagcagatg 120

ctacaaagac gacagaaaag tctgggtccg aagccaagtt gaagggaact ggtgcaaaga 180
aacaataaaa agttgactat gcatgtgcag tcctgttatg ttttgtgagt tctgtttgat 240
agtttccagc tattcttttg gtagtgaata aagagaaaat tttttatatt taaaaaaaaa 300
aaaccgagac ca 312

<210> 4187
<211> 451
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-026-Q1-E1-D8
<400> 4187

tagagtgagt cgtattagtt gtatgtggaa accgcatttg tctgcatttc tcataaacca 60
accgtcgatc ctacctgcag ttttatccac taggaatcca ttcgttggtc gtcgacgttt 120
gttgcaaaca actttgtgtt tcaaagcatc atcttcgtac ggagatatgg gttcacctac 180
tgcattccacc aaaaaccttg tggtcgacag acccaagtcc atgaactatg aagcagtctt 240
ggacttttta ttgcaaaga atgagcagtt tcaacgaggt ttccaaacag gtactatttt 300
agaacacgaa acgttacctg aatatcgcca agcgttggca caagggtggac agaaacctat 360
tgctacgata gtgacgtgtt gtgactctcg cgtcattcca gaagcaatct ttcaacaagg 420
gtttggcaaa ctgtttacgg taagaacagc a 451

<210> 4188
<211> 393
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-026-Q1-E1-D9
<400> 4188

tacaatactc tatactgagt cgtattaaga ggaccgaatc agggtaagag gtagaggacc 60
aagacgagaa gagagaatgc tgggtggatt agcgaatcaa gagaaggga gtaaaaggta 120
agaaagagga aaggtttacg agagaaggaa gtagaaagag gagagtgtaa ggcggtgtca 180
taatagaaat ccgaaaggag tagaagaaaa tagagacaag aaacaaaaga agaggaaagc 240
cgtactgaaa acggacacag gtactcgagg agaaaggaga cccagattaa ggtgagagaa 300

tggacgagta ggaactacgc agaaggatat ggtatctgtc gtagaacata tgatagaagc 360
 agcacctact gtttagcaaa aacaaaacac tct 393

<210> 4189
 <211> 280
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-026-Q1-E1-E11
 <400> 4189

ctctagagtg attcatatga tgacttattg gtttacgcgc aactcgaact ttttaagacg 60
 caaagccata tctatTTTTA gtattgtggg atttgtctgg ttaggagcca tctgcatggc 120
 gattatcgga gcgtgggcct aagaataaaa tttgtttgag acgtcgtggt gcagatgact 180
 cgcattgttg gtagttggtt caagtttgac aagagaaaac atttgttgct acttcttaca 240
 aataaaaaag ttcaaggaca aattgtagat aaaacaaaat 280

<210> 4190
 <211> 327
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-026-Q1-E1-E12
 <400> 4190

ttctggaaga acataagtat ggagaatgga cagaggaaga tattgagctc tttgttcgtg 60
 ttgccanaac atacggaagc ggtgacaaat ggggactatt tgctagtcatt attcctcata 120
 gagtgggtta tcagtgtagt gcagcgtatc gtgagatagt gattcctcga ggacttataa 180
 gagaccctaa ctttaaaatg actagaaatg gtaaagccgt atacgttgga aagtatcatc 240
 actaaatggtt acttttgttg gctacgacat ttctgaaatg aataaaaagcc ttttgcagtc 300
 ttttcaacgc aaaaaaata aaaagaa 327

<210> 4191
 <211> 435
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-E7

<400> 4191

tacaatacac tatagtgagt cgtaatatcg tttgacgttg gtgcctcatt aagccatcgt 60
tgaactacat cttttatctc ttagcacaaa cacaaattaa agaacaatgc gtgagggttat 120
ttctctacat attggtcaag caggtgttca agtagcaaac tcttgctggg aactttattg 180
tttagagcat ggtgtcaacg ctgatggaac cattgataaa aagggaaaca cagcaaacga 240
agaagctttt ggtaccttct ttaccagac aagctcgga cgatatgttc ctcgttgtgt 300
atttgctgac ttggaacctt ctgctgtaga tgaagtctgt accggtgcct accgccatct 360
ctatcatcca gaacaactta tttccggcaa agaagatgct gcaaacaatt atgcaagagg 420
acattatact attgg 435

<210> 4192

<211> 104

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-E9

<400> 4192

tacaattctc tatagtgagt cgtattaacg cgtgggaggga cgcgaggga aaagaaaaag 60
aacaagcaa aaagaaaata caaatataaa aaaactgaaa aaga 104

<210> 4193

<211> 435

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-F9

<400> 4193

cacgcgtctg tagaaatcca tgaaagtga agcgagtaaa agatgaggta tagagaatgg 60
cggctctaac ggtaaggatc caaaggtagc gaagtaaata gacgtttgaa aggcgtccag 120
tatgaaagga gaaacgagt tagcactgtc tagtcgtcca actcagcgaa acagcaataa 180
ctgtgaaaat gcagtaaact agcagtagga cggaaagacc ccataattct tgactagata 240
ggtttaggga ggagagagaa tcatgaagta gaggagggtgg ggtaagagat gaaagaccac 300

tgcatgagga taaggaatct aactgagtaa ggaaaataag cttaagctag tttggctggg 360
gaagtaaagc ctaagaaaga gtaaattagg caagcaaagg catgagagaa gtataataac 420
agaagcatgc ttgag 435

<210> 4194
<211> 352
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-026-Q1-E1-H3

<400> 4194

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ggcgcccaaa ataaagatca aaagtaccaa ataataaacg ttttgaaggc tccagtatga 120
aaggagaaac gagtgtagca ctgtctagtc gtccaactca gcgaaacagc aataactgtg 180
aaaatgcagt aaactagcag taggacggaa agaccccata attcttgact agataggttt 240
agggaggaga gagaatcatg aagtanagga ggtggggtaa gagatgaaag accactgcat 300
gangataagg aatctaactg agtaaggaaa ataagcttaa gctattttgg ct 352

<210> 4195
<211> 308
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-H5

<400> 4195

tacacgcac tacaagttgt cgtcattaac aggagctttg caatgcggat aaagatgtac 60
tggaagagac tttaggatcg aacaatgcga agatcttcca tgattttgtc catgcaactg 120
caccaaattt gtacgaagga caattttaa ataggatttta tgacttattt tgttgtttgc 180
aacgaaaaag ataaagagtg acttgcaagc taacacacacac aacacacacac 240
accacaaaca caacacacac aaaccaacac acaacacacac caacacacac acacacacac 300
aaacacacac 308

<210> 4196
<211> 405

<212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-H7

<400> 4196

cacgcatccg ccagcgcgtc cgcccacgcg tccgcaagta tactgttctg ccaacgtttg 60
 tccacacttg ggaacaccat tggatcaagg aacggatatct agtggtaact tgatatgtgc 120
 tcagcataag acttcttgga ggctatccga tggaaaactt gctggaaagt ggtgtcctta 180
 tccacctatc ttggggccgc tgttgggaaa gttgaaagct cctcaagact tgacggtctt 240
 tccagtcaga gaaatgaacg gttttattga ggctcttatt gacttggatg ctgctaaaga 300
 gtttgaaagt aactattgga gaggaatatt ggacgctcaa ggtaaagcta ctggtggata 360
 ttattaaata gcttgtccct aataaagttt ctgctggatt gttgg 405

<210> 4197
 <211> 322
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-026-Q1-E1-H9

<400> 4197

ccacgctgtc cgcgaaatgt cctatttcag cttcaagggt tctatcctgt ttctcttcca 60
 cagacaacaa agtcgagact gttgtgcata ttactgtgtt gcctcctttg ctaccaatgc 120
 ttatttgagg tagaatcttc gagcaatgag tcttgtagca gctcaatgat aatactgtgc 180
 tattagaatg aactgcacca aagcacgtta tacttagtaa ctagttattt tgtccagcgg 240
 aataatttta tctgtgttgc acttgtagca atgaaaacac ctagagtcgt gttaaaaaaa 300
 aaaaaaaac aaaacagaaa at 322

<210> 4198
 <211> 308
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-027-Q1-E1-B12

<400> 4198

gaagactgga ccaaggaaaa gtatcaaatt cgattggcta ttacgccgta tttacaagcc 60

gaacaggacc gtttggaagt gaaagagacg catcgtcgtc ttcgtcaaga agcagaactt 120
atgacggatg tgcctgaata tcaaccggga gaaaatttgt acaaaacaag agagtttact 180
ccctatgtca aaccgctagt acctggagtt ggtccacaag gactttgaaa gttatctaaa 240
gtgatggttg ccaataaagc tggaatggag tttagttttg tgcaaaagaa aggtatgcat 300
aaaccaac 308

<210> 4199
<211> 281
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-028-Q1-E1-C5
<400> 4199

gcgtccgggc gttcagtatg aaaggagaaa cgagtgtagc actgtctagt cgtcaaactc 60
agcgaaacag caataactgt gaaaatgcat taaactagca ttaggacgga aagaccccat 120
aattcttgac tagatagggt tagggaggag agagaatcat gaagtagagg aggtggggta 180
agagatgaaa gaccactgca tgaggataag gaatctaact gagtaacgac aataagctta 240
agctagtttg gctggggaag taaagcctaa gaaagagtaa a 281

<210> 4200
<211> 275
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-028-Q1-E1-E10
<400> 4200

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cttggccggt tggcactgtt ggcagtggga ggctttcttc ctcacatgtt tctcactcat 120
caaggtgtgg tggaacaact aactcathtt cgttcgttgc ctgttggtgg gggtgcttga 180
ggatatgtgtg tgtgtgtgtt tgtgtgtttc tgtgtggaat aataatgcag ttggaccatc 240
gaaataaaag atggttttga catataaaaa acaac 275

<210> 4201

<211> 373
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-028-Q1-E1-E4

 <400> 4201

 ttttcctcac ttggctttct cgtacgttct ctcaactcac agcacgttct ttcgacagcc 60
 gtgcaccacc ttcttgagga ggtaagggtc tcggtttaatt cggattaatt tacgtgatcc 120
 agcccttttt ccgattcacg tcaattgctt tgggtttctt tcttgcgctt ttactcccct 180
 ggtggaatga ctcaactttt tcttactcat tctttctttt actgcataca ctacacgggt 240
 tcctaatacg tttcaacttc tatgctttct cgcctcattt actgtgtcat cttttcattt 300
 ctttctgcc tttctctaca catctccgca tttcatcgct ttctccttc tctcctttcc 360
 cttcaactttt aca 373

<210> 4202
 <211> 167
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-028-Q1-E1-H3

 <400> 4202

 agagggaaaa cttgtttatt gaaagacacg tatttctttg gttgtacaaa cgtaaactgg 60
 catggatatt tctaacgttg tccctacttc aactacgcag aggacgtact tttcccctgg 120
 ccatggtata gcatgcatcc acttgtgttt gtccacgctc tatgcac 167

<210> 4203
 <211> 451
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-029-Q1-E1-A12

 <400> 4203

 ccacgcgtcc gcaagaccga gggttgaac ggaatcgaat ttaagttgcc ttgtttttgt 60
 cccgttgga cttgcaagg tttccatgaa tatttaaaat gtcctcctca gtgcaaaaat 120
 atttagtgaa tttggctacc tatgtgacca tcaaaagagg ggatataacg aaagagcaag 180

ttgacgctat agtcaatgca gccaatgaac aactgacggg aggtggaggt gtaagtggag 240
ctattcatat agctgcaggt ccaaaatata cggaagcctg tttaaagggt cacgatgtaa 300
tacggggagt tcggtgcccc actggagaag ccagaatagt gacaggaggg cagttaccag 360
ctccatatgt catcaatact gtgggacctg tttattctag tgttccaaat cctgcagagt 420
tggttgaatc ctgttacaga tctgttttgc a 451

<210> 4204
<211> 514
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-029-Q1-E1-A8
<400> 4204

cggaattccg ggatcgacca cgcgtccgcc cacgcgtccg cccacgcgtc cgaatctttg 60
tggattttcc tgggagagag agagagaaaag agcgggaaaa aaagagagag agtgtccctc 120
ctccttgtgt gtcgggtttt gcgggaaaac aactgctccc tgtggctatt ttcgtgtgtt 180
gtcagatcct aaggtggacg ctttcatgtc cattcctgac gttttaaaat atacaaagca 240
aaacggggaa ctagacgcta ctccctatat agaagaatac aatacttttt atcagcacgg 300
ctacgagtcc atagaagata gacaactaag gcagtcacag aaagcaaaag aatgtatata 360
tagtttttat aacctagtat cggactttta tgaatatggg tgggcaacag agttttcact 420
ttgcttattt acaaaagaat gaacctctgg cgtgtggatt gttacgctat gaatacgtgc 480
ttccgtggag gatgaaagta cancgtaaga taga 514

<210> 4205
<211> 456
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-029-Q1-E1-B10
<400> 4205

gtccacccag cgcgtccgca cacgcgaccg cccacgcgtc cgcccacgcg tccgtcctc 60
ctcaagttgg tttctcgagg attatttcct tgcaccctaa atattacttt tatatacaac 120
ctataacatg gagcacaagt ccaaaatgtg tagtaaagaa acaaaagtca accaactttc 180

gacatacatg gtatatgggt gataatcata gctctcgtcc aaagagcaat cgttttcata 240
 tttgggttaa gtccttgaca actggacgca tatttcateg ttcaagtggg ggtactgggt 300
 ctgttggtgg tggaatgggt ggaggtagtg gaggtgggtc aagtagtgca ggaggggaagg 360
 gaaaagggtg tgcgcacccct ctcttggctt tctggatgcg ttacaatcga ctgttagagt 420
 cgcgtccttt attgaccaa gcacttactt ccttga 456

<210> 4206
 <211> 323
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-029-Q1-E1-B11
 <400> 4206

ttccgaggtc caccacgcg tccgcatatt atcacgtgaa aggctatcca gttgataatt 60
 ctggaaaatc tgcaatgtat tgatatgtga taagaatggc aaggcttcag tttccttgta 120
 tatactgagt ggaaacaagc taggtatcaa ccccaaagggt tggaatacac ccaacgcttc 180
 tgcgaagggg tccaatgttt tactgataat aatgcctgaa aactcaaaat gtttgttggt 240
 tcaaaggaca agcttcttat gaaaacgtaa aacctcctcc ataaaagcaa ctttcgacaa 300
 aaaaaaaaaa aaaaatccaa aaa 323

<210> 4207
 <211> 324
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-029-Q1-E1-C10
 <400> 4207

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 cacctttttc caactttatg atagaatctt atcgtttggt gaggcgttgt acaaagccag 120
 accgtanaga attcctcaag actgccggag caactgcagt cgggtttctg gttatgggat 180
 tcattggctt tttcgtgctg ttaatacata taccataaa caacatcctt ttgagctaaa 240
 aagatggaca cgttgtgtg ttggactcgt tttgtcttct cattctttgg gacgttttat 300

cgaaaaacgc tgtttttctt aaaa

324

<210> 4208

<211> 458

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-C11

<400> 4208

ttccaggtcc acccacgcgt ccgcagacgc gagggcggac gcgtgggcgg acgcgtgggc 60

gggagaagaa atacgacctt ttccttcttc tgttgtggga attttctctt ggtacgaaaa 120

tactccaaaa caaagagcag acaccgctgt tgtaattgcc tcaagactat gtctctttat 180

aacaagaata tactggatcg attcaagttg gatggaaaaa tagctctcgt tacaggtgca 240

gctcaaggaa taggaaaagc actagccatt gcgctagctc aggcaggagc tgctgctgta 300

ggtttattgg acttggagtc tgagactctt cgtcatcagg aaaaggagct caacgcccac 360

ttttcttcca ctcaaatatt ggctttggta gcagtaagga aggatatcaa ccactgtgtt 420

gtgtactttg gaagagattc ttttattaaa gcacactg 458

<210> 4209

<211> 456

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-C12

<400> 4209

gtccaccac gcgtccggca aagtatgaat acaggtggtg ctgagaattt ttcaccagcg 60

gatatacaaa atttaatgaa gcaaaaactt caggaactca aaacaactat tgagatagtt 120

caagaacaat ttcgagacc aaccgcacc actttcatct gtgttacgat agcagaagct 180

ctttctatat atgaaacgga gcgtcttgtc cagcaactag cttcttacga gatggactgt 240

agaaatattg ttgtcaacca gttattcgac ccacaggagg aacaaaagag tgaggcgcta 300

ttgatccgcy ctagaatgca acaaaagtat ttagatcaag tgcaccaact ctattccggc 360

gaaatgtgcc tcattaaagc gcctcttctg cctgaggaat tgaacggttt ggaacaactt 420

gaaaagttcg ccaactacct gaaacttgaa gagcat 456

<210> 4210
 <211> 540
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-C5

<400> 4210

ggaattccgg aatcgaccac gcgtccgaac ttccttcaga acttccttat agtttggcaa 60
 tggagcttaa taagggttct tcgtcggaac gaccatcgaa cgagtatcca aaccacacat 120
 cgcaagatcc tgaaacattg cgctctcata ttgccgatgc caagttacag actgaacaaa 180
 caaagcgaaa agtgaaagaa attcaagaga aaatggctcg gttacgtagc gagaagaaaag 240
 tgcttcagga tcaaatcaag tcgtacgata ctgaaattca acaaattcgg tcgcagctta 300
 gtgatgaaca agctaattac tatgtggaaa ctctcttttt cccgaatgaa atggaaaagtc 360
 gtcgaatgga tggaggagac aagattagca acaagaagag tatcaacaaa ggaacggaga 420
 gtcttccttc ttctgaacct acaacggagg acttgccacc tccgccatct tatgacgaaa 480
 ttgttggttc cgcaagtcct ccgaccaact ctcaaggcaa gtcagcaagt cctccaacct 540

<210> 4211
 <211> 448
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-029-Q1-E1-D11

<400> 4211

tccaccacg cgtccgcaca cggtacgga agaaaatggc tccaaaaggt gcaaagagtg 60
 ttcctgttgc aggcaagaaa ccaatcacca aaagtataa aaagtccaaa aagaagaggt 120
 cagagtecta tgctatcgac atttacaagg tcttgaagca agtgcacccg gatactggca 180
 tatectccaa ggcgatgagc atcatgaact cctttgtgaa cgatatattt gaacgtattg 240
 ccagtgaagc tagtaaacctt gcagcttatt ccaagacgaa gactttgact tctcgtgaaa 300
 tacagactgc tgtacgtctg ttgtccctg gataactcgc caagcatgca gtttcggaag 360
 gtacgaaagc agtaacaaaag tacacttctt cgtaatacgt actttgaaca tatggtgttt 420
 gtcaacacct tttttgggag gacttgtc 448

<210> 4212
 <211> 452
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-029-Q1-E1-D12

 <400> 4212

 gtcgaccac gcttccgatc gatcccaaga gtgcagactt tcgtcgcatt gcatcggaag 60
 ctgcccgcac tattcctgga agagaaaatg gtggcaactg cgatatcaaa aacttgagtc 120
 gaggaagtag agtttacttg cctgtgtttg ttccaggagc aaacttttcg ataggagacc 180
 ttcatttttag tcaaggagat ggcgaagtat cgttttgtgg tgcgattgaa atgtcgggtt 240
 atgcaattct tcggtgtcaa atcattcgcc aaggaatgga ccgttacttg agtccgatgg 300
 gaccaaccaa actacatgtg aatcctatct tcgaagtggg acctttggag ccgagatatt 360
 cggaatattt ggtatttgaa ggtgtttcgg tggatgagta cggcagacaa cattatttgg 420
 atgcatccgt tgcctacaaa cgagccgtgt tg 452

<210> 4213
 <211> 434
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-029-Q1-E1-E9

 <400> 4213

 ttccaggtcc acccacgcgt ccggaagatt aaacggaata caactggcct cgggtctactc 60
 ccgcctaaca actaccttca caaggaagct ctttttgagg ctttgtaact tctaaaaaac 120
 atgtgtttta acgggataac gttgtatttg atgacttttg tgtctttttc caagtgaaaa 180
 cacccaatcc ttttaacaagg agcacaagag tagaaattat ccggcgggct tgtaagataa 240
 tttctgttgc ccaaaagaat cttgctgtag caagtgtccg ctttttagaaa ggaaaagaag 300
 gttttcttag aaatatattt agagaaaaat cttgttccat attcccttac tctcgtatat 360
 tcaagttctt ccaagttcta ccgtcaagag ggaaaattca agggaaactg agcactacgg 420
 ttttgtttgt caaa 434

<210> 4214

<211> 464
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-029-Q1-E1-G2

 <400> 4214

 cggacttccg ggatcgacca cgcgtccgcc cacgcgtccg cccacgcgtc cgaccaatgg 60
 gagaatgaaa taagagcatg gaacaacaac aagatgctcg aaaggtacct ccaggctatg 120
 tattgttgaa aagttccgat gggtttgagt tttatattac cgaagaatgt gccaaagtgt 180
 ccaagtttct gaaaactacg ttggaaagtg ggttctccga ggccaagacc ggacagttgg 240
 tactcaacga aatacctggg cgtttattgg aaaaagtatg tgaatacttt tattataata 300
 taatgcacca acaaaccgac ggaaacttgc ctcttttcga gtttctcca gaaatagcgg 360
 tagaactact tatggttgcc aactttctgg acacctagaa atgcttgcca cctagaagag 420
 taagcaactc aagtatatat aaatatgtgc aacaaccttt ccac 464

<210> 4215
 <211> 558
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-029-Q1-E1-G5

 <400> 4215

 ggaataccgg gatcgaccac gcgtccgcgg acgcgtgggt gctgctgcaa cggcagtgca 60
 cctttgcaaa cttttcgttg tagcgcgtac agtagaaata ggcgcatatt tgtacttggc 120
 aacacttata ccacagctat gagtattaaa agtacactga aagttacttt tgtaaccgga 180
 aaccaaata aactggaaga agtacgatca atactagcgg gactagataa ggttggttata 240
 gagggcaagc acattgatct tccagaattg caaggcgaac cagaagatat cgccaaagag 300
 aaatgcagac tagccgcaa agcagttgga ggtcctgttc tagtagaaga tacttgttta 360
 tgcttcaatg ctttaaaagg cttaccggga ctttatatca agtggtttct acagaaactt 420
 ggtcacgatg gcctcaatcg acttttatat ggttttgagg ataagacggc ttatgctttg 480
 tgtacttttg gttttcgatg ggagcaccga gtgatgcagt tgtgctttgt ggtaggacag 540
 acggtatcat tgtacctg 558

<210> 4216
 <211> 436
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-029-Q1-E1-G9

 <400> 4216

 ttcccaggtc caccacgcg tccgcaaacy cgtccgccc cgcgtccggt ttgtggtggg 60
 aagattgacg acatgccaaa gaacaaagga aaaggaggga agaatcgtcg tgcaggaaag 120
 aacgacaatg aagaagaaaa gcgggaactt gtgataaaag aagagggcca agaatatgcg 180
 caagtgactc gcatgttggg aaacggacgg tgtgaagctt tatgtttcga cggtagactga 240
 aggctatgcc atattcgagg gaagatgaga aagaaggttt ggattaatgc cggagatatt 300
 gttttaattg gcttgagaga ctatcaagac gaaaaagccg atattataact aaagtataat 360
 ccagatgaag ctagagcatt gaagtctcaa ggagaaattc cagacaccac gaaaatcaac 420
 gaagaagacg gtgaag 436

<210> 4217
 <211> 461
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-030-Q1-E1-A10

 <400> 4217

 ttccgggtcg accacgcgct cgaccgtgca tgcgtgttcc tcgtcgtgct cctcctggcc 60
 gccatcgcgg tggcacggtt cgcgggcgcc gcacgcgtgg acgttggtga gggtaggtcc 120
 atggcatccg ccgatgcacc ggaggcgggc gccgatgctc ccgtcctag ccccgactcc 180
 gcctcatccc cagactcgct atcgaggagg ccctctagca gcagttcttc cgactagacg 240
 caaaaacctc ttcattctct ggaataacta acagtatata cgttgcaccc tgatgatata 300
 gaaacatgta cgtgcatcag tgtatggaat gcgagtggca aacacatgga atgtgcttgc 360
 ctaattattg tttatttctt tatttattat atgtctctct cgtttgtttt ttatttttctg 420
 taatgcaagt aatataattt gttataccca atatatatag a 461

<210> 4218

<211> 426
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-030-Q1-E1-B12

 <400> 4218

 taccggtccc ccnnttcggt gtcacccacg cgctccgcacc gcgtccgtcc ttcttcgggc 60
 tgggccgctcg atccccgtttt ccatccgggt ccaatccgat tcagccaacc gctgtgaatg 120
 atggcgctaa acctgttccc accagaccgg cgcgggcgtg gcggcgccac cggcggcacc 180
 acgagcggcc gtcgtcggg cggcggccac ggcccaacgc tcggccgctcg tcgctgcggc 240
 ggccaccgtg gcgcccggc cgcgctcggc gcccgcgggc gctccggcgc tccagctgca 300
 gacgatgacg gtggaccgg cccccgcgca agcgcccgac gcggtgaatc cggatctcgc 360
 catggcgtgc caggcgctgg tggaggccgc gctcgaggcg gatcacgccg acgtcgccgc 420
 cgagct 426

<210> 4219
 <211> 234
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-030-Q1-E1-B2

 <400> 4219

 cggtcggtat tccgggtcga ccacgcgtcc gaataaattt ggtattataa acgattattt 60
 aaatactgaa aaagattaat caaaaaatct tgtgtaacca atcatgttgc tcgagcattt 120
 gactttgcta gtggaggccg cttctgagga tgcatactaa attgcctgtc aattagaagt 180
 cctacatctt cgatagtgca ctctctcatg acttcgagtc atttcttgat aaat 234

<210> 4220
 <211> 444
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-030-Q1-E1-B5

 <400> 4220

 taccggtcag taaattccc ggtccacca cgcgtccgca aacgcgtccg cgttgattgt 60

taaattatgg cggaccatga tcaagtggta gcgtacaagc gttcagaaga agaaaaatgg 120
 agccaagcag gtgaaaaaag atggcagtta ttcaaaagac tggaaaaaga gaatgctact 180
 gcccgctttt tcttacaaaa caaagctatt tttccagggtg ctagagtttt ggaactggct 240
 tgtgggttccg gagaaaccac tttgcaagta gctgcgaaag taagaggcta ttctgtacct 300
 tcaggagaga ccacggggga agtgggtgat aaattgttgg atatattacg tccatcttat 360
 caccaggaag ggaaactgga tgggtgccagc aatagtgggt cggtagtagg tgtagatata 420
 gccaaaggaa tgctgaatgt gttc 444

<210> 4221
 <211> 450
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-030-Q1-E1-B6
 <400> 4221

taccggtcag acattcccgg gtccaccac gcgtccggat ggacttgctg ctgcaattgt 60
 atcacaacca gcagataccg tactttccaa aatcaatcaa gtaaagaccg agggttctac 120
 tgcaaaggca atcgttacga ttatgaaaca actcgggtgtt cgaaggctgt tcttaggaac 180
 aggacctcgt tgtttgatgg ttggatgggt gactgcaggt caattcttca tctatgatta 240
 tgtgaaacaa cttcttggca tcttccccac ccaacaaagt gcgccaaga caattgctgc 300
 aaagggtctaa aaattttaac taatgtaaga tggatggaaa acagactttg ttttcctgaa 360
 aatgggttca gttgaactca ttctgtgta ctctgttgtt tgtttggaaat gtttgtcatg 420
 ggatcatttt cagcatgggtg acattttttc 450

<210> 4222
 <211> 478
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-030-Q1-E1-B7
 <400> 4222

tacggtccat cattcccggg tccaccacg cgctccggact tatagcgctt catgtcagtt 60
 gcatcttttg tttggcttac tgggtccaact gtcacacatg ataataagga gactcgtaat 120

acctgttggtg cacataccag atatggcttg ggacgagtag tttcctttcg gaatcataat 180
 aggggacctt gcgtggaatc tagacgaccc atatacacaag gcaggctaaa taacttgacc 240
 atgatgcccc ttggtgttcc caaggtagct taccgtgttc ctggtgctcc tcaagcagat 300
 tgggtagata ttacaatcg actctatcgc gaacgtatta tattcttagg acaagagatt 360
 gacgacgaga tttcaaacca aatcatagca gtaatgctct atttagactc tgaagataat 420
 accaagccta tatatcttta tatcaactct cctgaggggt tccgttattg ccggtttg 478

<210> 4223
 <211> 464
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-030-Q1-E1-B8

<400> 4223
 acgcgtgcat gtaccggtcc atcattcccg gggtcaccca cgcggtccgaa gctcttccgt 60
 atattctttg tgcttggaca atggttgcaa agactgctct gagttgcctc ttctgctctt 120
 tccttagcgc tgccgcagtt gcagccgacg tagtttcaga ggagagatgg ggatatgctc 180
 agcaatccca acagcagcaa cagtgcacaac aagtatgtaa acagtatgca tactatcaga 240
 gtccagtctg cacttccgta accacacaga tcccatactg gacccaatgc tcgaagactg 300
 tgcaaacctt tgtcccaagc cagtgcagta cttataccca atctcctaca tggacctatt 360
 gcagcaccta caccaccact agcgtaccat ctcaatgcag caaggccgtg actacttata 420
 ctcatacctg ctgtgcttat gcccaacaaa cttcctatgc agtc 464

<210> 4224
 <211> 350
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-030-Q1-E1-C10

<400> 4224
 tttaggacaa ccaatttgtc gtgaatttga gctaaaaaat gtaatttaca tttgatctct 60
 ctctctgctc taccgttaca gcagcaggca caagacgcag actgcttagg ggtcacaagg 120
 cttacagtta catccccacg aacaaatagg aagcgggtctg tgcccggtac gcctgacaaa 180

taagtgttac acccttgtcc aactacaggc ttgttcggtt agctctcaat ccatgtgaat 240
tgaatgagat tggatgtggt tgaatcgcaa acaagttaaa cttcttctta attttttcca 300
atctcatcca atccatatgt tttagaaata accgaacaag gatttgttgt 350

<210> 4225
<211> 413
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-030-Q1-E1-C2
<400> 4225

acggtcgtat ttccgggtcg accacgcgtc cgcactcatt caaatgcgtc agagtgtgtc 60
gacaaaaccc aaagatacct cttccacaac ttgtccgcta aaagatacac tgttttactaa 120
aagggatatt tttattgtgc taataactaac ttttttatct tttctcacia ggttttatag 180
actagctgaa ccacctgcag tggatattga tgaggtccac tttggtaaatt ttgtgacttg 240
gtactttaca ggagaatact attttgatat tcatccacca cttggaaagc ttattctgta 300
tattggcggc gtacttgga aatataaacc aggttttctc tttgacgcta taggagcgga 360
atatggagaa acaaagtttt atgtgttacg ttgtgttgca gcaatatttg gaa 413

<210> 4226
<211> 434
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-030-Q1-E1-C5
<400> 4226

gtaccggtcc atcattcccc ggtccaccca cgcgtccgca gacgcgtggg ctattctaga 60
ttgctcgctg tggagaagaa atggaacaac gtcattgtgc aacagacaac agtgggacta 120
gttattggac acgttttagaa gccttggtga agcaatactt gccaaactcg caagttttca 180
aggttttaag aacgttgga cgaaaacaca tatctttggt tgacaatctt tctattgacg 240
agatggaaca actcttgaga gggaagcagt aaagaagtgg agaaagatat taggtggagt 300
gtcctaggtg acgtggaagg aattgttgtt ttgattttgt ttgtgtgtat tcaatgtata 360
agcaagcaat aaatagtttt ttcctacaaa aaaaaaatt cacatgcgta atgtaccggt 420

caaaaaaatt gcaa

434

<210> 4227
<211> 376
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-C6

<400> 4227

gtaccggtcc gatgcattcc gggctccacc cacgcgtccg cacacgcgtc cggcgtaatt 60
acaagttgtc acgagatatg aaaaaggac aatgtcgttt ttgggaatat gctgtatttt 120
aaaacattgg ctagagctag tttcgaatac taaaagtag ttgtgaaaaa aaaaaaaaaa 180
aaaagaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gaaaaaaaaa aagaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aacaaaaaaa aaagacaaaa aaaaaaaaac 300
aaaaaaacgc actacatgaa atgaaaatga aagggggggc gccctcagg atgtcacttt 360
ttacgagtgg gggaaa 376

<210> 4228
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-D1

<400> 4228

taaagagcgg tgtggatttg cgctttcttt ggtcactgtt ttttgggctt ttctctcgtg 60
tattttgccg ttttaaagct aggatattat ttatgtcctg tgatgttttg gtactagtct 120
ttttcgatgc ttttagttga gtgaatggct ctattgacac ctaagggtgc agttttgtgc 180
cattctctac atactaaact gccaaactgt gcaagtacac aaaaaatata catatgttta 240
tacagacccc cagcttgacg gatgagttca atgattgaaa aggaatcatg aaaagcaaag 300
gagtagtgga catgtagaga aagcacttga aaaagtagtc acgttcttgt acttgtctat 360
gtgtaacaac tgttttttgc ttgaagaggt tacaagtttg ttgtactcga caagctttcc 420
acgtgtcgga cagtgccttt aagca 445

<210> 4229
 <211> 389
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-030-Q1-E1-D10
 <400> 4229
 gtaccggtcc cacattcgcg ggtccacca cgcgtccgat cctccaccac caccaccaag 60
 ctcaacaaca gccagctcgc gaaaataatg aagagccgca gcatggcatc atcggccgcg 120
 ctcttggtgc tagccctcgc gctagtggcg gccaccgccc cacatgtagc ggaggcaaag 180
 aagaggagag cggcggagag cggcgaggcg gcgaggcgga agaagatcca ggacgacttc 240
 tgctcgacgc tgtgcgaggg caagaagggg acggacctgg tcgtgtgcaa ggagtcctgc 300
 gcgctctccc agcagtccaa cctggtgctg tacggcagga tccagtgcaa tggcaagtgc 360
 accgagcaga atggcatcac ggcgccggc 389

<210> 4230
 <211> 318
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-030-Q1-E1-D3
 <400> 4230
 gatagacctt ctcttggaag gactagttct tgcttattat caaacagata tgcttgga 60
 aattggaaag gttggttcga ttcttggaag agcaaactg aatatatcgt ttatgacgct 120
 cggaagacac ttaccttcaa agatggcaat ggtattgctt ggtcttgata atgaaccaga 180
 ttcttctact attgaaagga taagagttga gctgagtctt gaaagaaaac cgatactttt 240
 agatctggat ggtcaacatg actgacattt cttctgtgtt gacataaaaag ccgttagttg 300
 tagcataaat aattctac 318

<210> 4231
 <211> 442
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-030-Q1-E1-D4

<400> 4231

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cgtgaggac tggaaagtga tgttgaaaac tcctttgtgc gggcaacaga agcacaccgg 120
tgagtatgag agtaaatcga cccacacata ggaccaggaa cttagctgat tgatatgtgt 180
gatggagtgg aaattgcgtc taggactttg atagattcag atgggtcaaa tgctggtatt 240
gcttttccaa ctggatgctc catgaatcat gtggctgctc attagacgcc caatgctgga 300
gatgacacag tgtagatta tcgagatgtg atgggtacttg actttggaat acatgtcaat 360
ggccatagca tataactctgg acgtaacaat gcgtttgatc ccatatagga cagcttatta 420
ctggcagtga tggaaactac ga 442

<210> 4232

<211> 481

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-D5

<400> 4232

gtaccggtca gacacttccg gggtcaccca cgcgtccgga cttttattct ttagttttgc 60
cacagatgga gcctgtgcta caagaaatac aagtcgatga gcctcttttc cagttatttc 120
ctggtatgac taaacaagaa attgtcaatc gagctcttat ggtaagaaaa gaagctatgg 180
agaaggagtc cctcatcga tgcgttgaag gtcttttctt cttgaaagaa acgttataca 240
gaaatagctt taactccgaa gcttttccaa aagataagct accgaatctt cgtatatttg 300
aagttggttc ttgttttga gtggctcttc gtaagctggg tcttgatggg gcttctcggt 360
ccaatgtctt tggttgtgat gtttccgaaa cttttgtgag ccttggtatc aaattttttg 420
acgataagtc tacctttggg gaacgtagtc gtctgttgag tgttttagcg gacaattttc 480
a 481

<210> 4233

<211> 148

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-D6

<400> 4233
 accggtcatg acattccggg gtcacccacg tgcgccagag gcgtatgcgt caggcattcc 60
 ttgttgacac ccgattcgaa tctacgtcac tcttcaacaa ccactttgcc tcataatcga 120
 ccagttacac cgtcgtctaca cattgtca 148

<210> 4234
 <211> 476
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-D7

<400> 4234
 gtaccggtca gacattcccc ggtccaccca cgcgtccgca cacgcgtccg cccacgcgtc 60
 cgatgtcatt gaaccaaggc agtgaatcga gttcagcaag tgattatgac ggcggtgata 120
 agtgtataga taataatggt atgcaaggag gaggagaatg taaagaacct agtgttgcag 180
 aaaccaagtt tctcgtctgg aaagacactg ccaagagaat aagagatgtc gtcattatttc 240
 ctctgatatc aggtcttatg attggtttag gaacgggtggg tggaagacgg ttaggacagg 300
 cgtggttcta ttcaaaggat gatgcgtatg tttccaagtg agacagtaac tgtaagtaag 360
 gatatatggc agttgccctg tgaggcagcg agcgagcgag tgagtgcgag ggcgcgcgcg 420
 cgtctttctt ttttttcctt tttgggtggg aaagacacag agagagagag agagag 476

<210> 4235
 <211> 290
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-030-Q1-E1-E3

<400> 4235
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 agagcgaatt ctagtcatta atcaaaagat aaaccaagtg cttgttcagg tagataaaga 120
 tttggagacc tggaatgaat atggcaaaga tattgtacaa gtaaaccaga taatacgaag 180
 atatatgcgc aaactgaata ttacacagtc ttgatttttg aatataaaca ggagaatatt 240
 atttcctccc aaaaaaaaaa acaactaaaa aatatggaaa aatcgaaaac 290

<210> 4236
 <211> 450
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-030-Q1-E1-E4

 <400> 4236

 acggtcgtat ttccgggtcg accacgcgtc cgcattgtggt ggtgggtggtt ggttggagtg 60
 agacacagac tatggcgatg gatagcttat cggtgttgta cgtcaccaac tgtccatttt 120
 tatccaaca caaaagtttt attaccacca accctctttt tgcgtggtat gtaaaacacc 180
 gcatttgccc catgagacaa cggaaaccag caccacatgg tcgtttgtcc atcgcttcac 240
 ggtttgtgga acaacaagaa ccatccaata agcacctagg acaagatttt gccgttcaaa 300
 cagacctatt gcagtccgac tcgagtgaga acttgaaagg gtttattaaa acgagagggt 360
 gtttgactcc tgatgtgccg tttgtatttt ggtggtaaga aaagacacaa gagagagaga 420
 gagagaanaa aaaattgtgt ccaactgaaga 450

<210> 4237
 <211> 467
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-030-Q1-E1-E6

 <400> 4237

 gtaccggtcc atcattcccc ggtgcacca cgcgtccgga gaatggtaat gtatggagta 60
 ataggagtaa tgataatgat gacgttaaga ggggaaggag taatgggagt acatgtagga 120
 atgtcatggt tagggataag tagtgtaata ataatgggaa taatgggaat gataaatgtg 180
 gtaagtaggt catataaaaag catggagtat atgtaaaggc ctagtagtat agtaagtgt 240
 aaagggaag gaaaggagag aaagaggaaa gggatgaaat gcagagatct ctatagaaag 300
 gcaagaaaga aaagaaagga agacacagta aatgaggcga gaaagcataa gaagtgaac 360
 ggattatgaa cccgtgtagt ctatgcagta aaagaaagaa tgagtaagag aaaagggagt 420
 cattccacca cgggagtaaa ggcgcacgac agaaacccaa agcaatt 467

<210> 4238
 <211> 389
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-030-Q1-E1-E7

 <400> 4238

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gtacgggtcta tcattcccgg gtccaccac gcgtccgtag aaaagccttc tcgaaagctg   60
aacaggaag cctagcggaa ctattgagac aacttttggc cactgccact ccaactgcca  120
cagagatacc tctgccaact gaagctccag ttccaactga agtccaatt gttacagtaa  180
gaccgattgg tactgcagtt cctataggga caccattgt gtcacgggct ccacgttcca  240
caacagtttc caggaatacg tttctttcgg aacaaattgc tgctgtttc cagcatctag  300
tacattaaga cttttagcta atctcaccat cttttgtagt accaagattc taggtttgcc  360
caagtgacca gcacatcggt gtgtggaca                                     389
  
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<210> 4239
 <211> 417
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-030-Q1-E1-E8

 <400> 4239

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cacgcgtgca ggtaccggtc catgtcatte cgggtccacc cacgcgtcag gacattcttt   60
gtgtgcctcg tggaaatccc gatcctttgt gggtatgcaa gttgcaacga gcttttcata  120
gcaacgacat tcatttttgt aagttacaag tggcgtggtg aataaggaat gcagtccaat  180
aatactggta caacattgcc taccggaata ttgacggtat ccgacgaatt agttcgtgga  240
gagtatgaag acctgagtgg gcccttgata gaccaaacc ggtcaaacta tttctttgag  300
aatctcgagt acattcggag aacattagct ggatgagaaa ccacaaattg aagagaatct  360
tcgacacctt tgtgatgact gtcattgttg tgtggtgttc acgacaggag gaacagg      417
  
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<210> 4240
 <211> 385
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-E9

<400> 4240

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cgacaggaag ggagtcaacg gcgcggccgt ggagaagacc atcctgaagc gcctcccgc 120
cacggatctg gcgtctctgg tcagccctct ccctctcctt ccccgcgcca gtgcgggtgc 180
ctcgcccggg ccgctcgtgc tctacgacga ctacgaggcg cggctgcggg agctgcagcg 240
gcagcgcgac tgg tacttga tgagcaccgc gggcgggggt ccggaggacc ccgcctactt 300
gcacttgctg gtggcggcgg ggcacccgga taacgaggac ccacagcagt ggtcccgcg 360
gcgacgaccg tctccgtgcc ccgag 385

<210> 4241

<211> 365

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-030-Q1-E1-F11

<400> 4241

ttcccggggg caccacgcg tccgcacacg cgtcccgcat gaaaaccctt gttcctcctg 60
gtcctcttct gcatcgtgca tggtagaag gaagagtcaa agggcatcga tgcgaaagcg 120
tccgggcctg gtgggtcctt cgacatcacc aagttgggcg cctccggcaa tggcaagaca 180
gacagcacga aggctgtgca ngaggcatgg gcatcggcgt gcggcggcac tgggaagcag 240
acaatcctca tacccaaggg cgacttcctt gtcggacaac tcaacttcac aggccttgc 300
aagggcgacg tgaccatcca ggtggatggc aatctgctgg cgaccacgga cctaagccag 360
taca 365

<210> 4242

<211> 475

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-F5

<400> 4242

gtaccggtca gacattcccg gggcaccca cgcgtccgga catatccgag gagatgttgc 60

aaccaatcct actcctgctg catcgttacc aagtaataat ggtgcagatg atggattggc 120
atccatttat ggcgagtaca atgcaggtag ccaaccaact agcgatacag tcgagtcttg 180
ggatacagga aatgatagtc cgcaaggtaa tgccgataca gagtcgaatt tcaaaagaga 240
gtcgcaccga cgaagaagaa gaagaaatga actgcgtaaa agtagtgaac agagcacatc 300
cacggaaacc gatccaaccg aacaaggaac tatccatgca gataccaaag atttgctttc 360
aagtcgtcaa gatacagatg tgttgtggag ttcttcttca tcggacaaga catcttcggc 420
aactgctttt tagtgttgac aagcagacga gtccaaaagc acaaacattc gaccg 475

<210> 4243
<211> 142
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-030-Q1-E1-F6
<400> 4243

gtgtttatatt catttgctat gaagtttccg tagacctgt cttcttgtgt cactgtccat 60
acgattgtgt tttctccggg ggaattattg cttttctcaa ctcattgggat ttcatgacac 120
aactgagca tgggtgtgcat cg 142

<210> 4244
<211> 376
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-030-Q1-E1-F8
<400> 4244

taccgggtcca tcattcccgg gtccacccac gcgtccgcaa ggttctcttt gagatattcc 60
ttacagtcgg gatagaaata gaacaactag gaacggttta tatgtatgtg tgtggttgta 120
taaagcaaac ttacttgttt cactgagaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
ataaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagaccatca atgaaaatag ttcaagactg 300
agaaatacgt gtctgaacat aacaaaatcc atctacaaaa caaaataaat ttcaccatct 360
ggatttaata acaaaa 376

<210> 4245
 <211> 474
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-F9

<400> 4245

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 tgctcatcgt cctcgcgggt gccgtcgcgg tcttgccgc gcggccggcg tctgcaggcg 120
 ggggagccgc ggcggtggcg gagatctgca tgaagactcc gtcccccgac ctgtgcacca 180
 ggacggcggg gaagcacgcc aacaagtaca aggtggtgga cgcggtgacg gtgctagaga 240
 tgcagggtgga cgcgttcaag aagcgcgtga aggcggcgcg gaggctcgcc aaggaggagg 300
 tcaagacggc cgcgacgcc gaggcgcgga gggcgctgaa cctctgcaag acctactacc 360
 tggacgccgc cgacaacctc ggcgcctgca agcgcgccat cggcttccgc gacgcccgtc 420
 acatccgcgc cacgatgagc atggtggcgc aggacacgca gaactgcgac gagg 474

<210> 4246
 <211> 418
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-G3

<400> 4246

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 gcagcaacaa caacactact cgttggttgt ctcttggttg gtggttatgt aagggtagcc 120
 atgggcaacc accgtggaga agactttatc acgttggggg aaccagtgc acgtttgagc 180
 gtgtcctcgt attctaacgg gcgtcaagta tgtgccaatg caggtcctt tgataatgcg 240
 agtctggaga ttgaatacac gcaacttgcc aataacaagg tatctgtcaa gctttgttct 300
 tctgtggtgt gagaaccttc atcaccctcg tacacaacgc ccttgagaga gtgctctgga 360
 aaaaagaaga gataaagaga cttctcgttg ccatcctcca aaaaaaaaag aaagaagg 418

<210> 4247
 <211> 486

<212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-030-Q1-E1-G6

<400> 4247

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 gcaagagaag tcagcagtgg ggaaaattgg gcaatgtaca gggaagtatg acccagtaat 120
 gaggagtggg gtaaacagaa aaggaagtaa aaggagggaa tgaagggaag ttatggcaaa 180
 aacacgtgcc agcagcagcg gtaaacgtg tgtagcaagc gtagagcaga agaactgggt 240
 gtaaaggtcg agtagtagag taagtgtaaa agggaaagga aaggagagaa agaggaaagg 300
 gatgaaatgc agagatctct agagaaaggc aagaaagaaa agaaaggaag acacagtaaa 360
 tgaggcgaga aagcatagga agtgaaacgg attaggaacc cgtgtagtct atgcagtaaa 420
 agaaagaatg agtaaganaa aaggagtgca ttcccacagg ggagtaaagg cgcaagaaag 480
 aaacca 486

<210> 4248
 <211> 464
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-030-Q1-E1-H1

<400> 4248

cctgccgcgt accggtccgt atttcncggg gtactaactg ggagagtaga acaagggtgtt 60
 gtaaagggtg gagatgaagt agaaattgta ggtcttcgta aggaaccttt aaagacgacg 120
 gtcattggag tggaaacatt taaaaagtcg ttggatcgtg gtcaagcagg agacaatgtt 180
 ggttgtttat tgcgtggagt gaaacgggaa gaggttcgtc gaggtcaaatt tctatgtaaa 240
 ccaggttcta tcaagccaca taagaagttt gaagcacaaa tgtacgtttt gaaaaaggaa 300
 gaaggaggtc gtcatactgc attcttttcc aaatatcgcc cgcagttttt ctttcgtact 360
 gcagatgtta caggcactgt gacacttcca gatggagtgg agatggctat gccaggagat 420
 aatcttacta gtattacgga gttgtttgaa cctgttgcca tgga 464

<210> 4249
 <211> 307
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-H11

<400> 4249

ggggccaccc acgcgtccgg agatacccaa tccgcctgaa tggaaagggg agttggccta 60
 tataattaaa gaaacagggg caattgcaag gtttggaag cacaagttag tttcaacaac 120
 caaaacatcc actatgatgg ttgccgtacg tggtctgttt tattcacctg gacagtctgc 180
 aacttctcct ggccatcatg ottaccaagg ggctgtaaca agctggccct tgtcgagatc 240
 tgcttctttc attgcaagtc caaggtggcc aggtcattca agttatgcac aagttattgt 300
 tcctcct 307

<210> 4250
 <211> 388
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-030-Q1-E1-H3

<400> 4250

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 cgcctgaaag tcgaagcaag tgggcgaagc gcatgaaaga aattattgag cctgggtggcg 120
 agttagtaac agtagttttt ccgattgggtg actacgaggg tggacctcct tatgcaatga 180
 gtcttgaact ctacaagcag tttttagagc cgctaggctt cgagagcttt tatatgaaga 240
 acataagtga tcaacttcca cctagttcca ttttcgttcg ctggaaactc tgtcagtaga 300
 atggaaatca tattgaagtg aaagttaatt tcttctgttt tgggtggttgt ttcgtctcat 360
 tagtaaaact agagtgactc catctccc 388

<210> 4251
 <211> 471
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-030-Q1-E1-H5

<400> 4251

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gcattgaaat tggcatccac cgaagaattc aaagcctatc aacaacaagt attaaagaat 120

gcaaaacact tagcttccaa gttacaagaa agagggtatc atttggttag tgggtggcaca 180

gataatcatt tgatgttggg agaccttcgt cctagtggaa tggatggagc cagagctgaa 240

aaagtattgg aaatgatttc agtggcagta aataagaata cggttcctgg tgataaaagt 300

gcttttactc ccggaggtat tcgaatgggt actcatgcga tgacatctcg tggattgggtg 360

gagaaagact ttgatcaggt agcagaattt gtcgataagg gagttgcgtt ggcagcaaag 420

attaagaaga attcagggtc cacactcaaa gactttanag atgctctcca g 471

<210> 4252

<211> 350

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-030-Q1-E1-H9

<400> 4252

acgcgtccga agtgaatcac tcgttgattt gttgtagtac gaacagaaaa cggaccacaa 60

aaaactcgag gatgggagga agatcatcat cacaaggacg tttttgttag atgtatatgt 120

tgcttagctt atttttctcg ctgtgtgtaa gggcttctat gccctgccca tgtacatgtt 180

tggcttcttg ccccatggaa tatacaaagc tcatttcgct ctaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaacaaaaa 300

gaaaaaaaaa aaaaaaaaaa caaaaaaaaaa gggggggccg cccaaaaggt 350

<210> 4253

<211> 306

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-031-Q1-E1-A1

<400> 4253

cccacgcgtc cgagatgcat tgctagccgt tggtcgaatg agctgcgtcg accctactac 60

tcattggaact cgtacttana ggtatgaact ttttatatta cctacatata tggatcgaga 120
tatctatatg tacgcttatt cacatgcact ccgaatggtg tatggcacct cgaaattctg 180
ccgaacgtag tcagtttggg aagaagctct taacagttta cggtaagcgt aaaagangcg 240
cacgggggtcg ctgggcatta atttctgaca atcgtacacg tgggaattgca ggttttgctg 300
cagact 306

<210> 4254
<211> 413
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-A12
<400> 4254

ccacgcgtcc gcattgcagg tgtttagctt actttttata gtcttggtgt ttggatacaa 60
aaatttgat acaagtcca gtccgaagaa gagaaaagca agcaacatag attactttat 120
agaagctgcc aatccgagga ttggtcatat aacacctttt attcaccagt gtttttttaa 180
cgacaacctg tcaaatgcc cttctgtata ttcagtcagt aaatcttcgt taactaggca 240
taateccaac tttttgtatc acttatggac ggagtcagag gcagaagaac ttatcaacag 300
gttttatccc ggtcttcaac aagtatggag gaaattcaac gagtcgtttg ttttacgagt 360
agactttttt aggtatattg tgttgcactt ttttggtgga gtttatgctg aca 413

<210> 4255
<211> 352
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-A4
<400> 4255

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tggttggttt cttggttagca gttgtacatt caacatcatc aaatgccaaa gggaggaaag 120
aaagattctt caaagaaaga agccacaagt aaacctgcag cagcagatgc tacaagacg 180
acagaaaagt ctggtccgga agccaagttg aagggaactg gtgcaaagaa acaataaaaa 240
gttgactatg catgtgcagt cctgttatgt tttgtgagtt ctgtttgata gtttccagct 300

attcttttgg tagtgaataa agagaaaatt ttttatattt aaaattgcac ag

352

<210> 4256
<211> 457
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-A5

<400> 4256

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gatatttgta aagacactta caggcaagac tataactctt gaagtggagc cttcagatac 120
tattgagaac gtcaagtcca agatacaaga caaggaagga attcctccag accagcaacg 180
tttgatattt gctggaaagc aactagaaga tggctgtact ctttcagact ataattattca 240
aaaggagtct acccttcact tggatttgcg tttaggggtt ggaatgcaga tattttgtgaa 300
gacacttaca ggcaagacta taactcttga agtggagcct tcagatacta ttgagaacgt 360
caagtccaag atacaagaca aggaaggaat tcctccagac cagcaacgtt tgatatttgc 420
tggaagcaa ctagaagatg gtcgtactcc ttcagac 457

<210> 4257
<211> 467
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-A7

<400> 4257

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taagacgggt gccaaagcact gcaacgaaca cgactgttgg gttattgtaa atggaaaagt 120
gtacgacgtg acgttatttt tggataaaca tcctgggtgga aaggagcttt tgttgagcta 180
tgcaggagag gatgctacag cagctctaga ggggtgctgga ggtcacgagc acagcaaata 240
tgcttacaag ttgcttgagg agtattattt ggggaagctc tcttcgagtg aagaggaaaag 300
ctcgaagggt gaaagaattg ggctgtttga cagcgacaag gggctctgggc aagtagttga 360
cgtagataac ctggctgact ttaagaagcc ttgttgcct caaattggaa ggctcggaga 420
gctgtacgat gtctgggtac actcatttcc aacaacggac catacag 467

<210> 4258
 <211> 441
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-031-Q1-E1-A8

 <400> 4258

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 ttgtcgttat cgtctatggc ggtatttgaa agtgatatag ttggtcctgc aattcacttt 120
 acgaaaaagt ataattcaag gaggcgctac aaggagtga tttcgtgctt tagtgcttcg 180
 ggtggtaaac cagggtggtt cttttgacat aagccgaaaa ttactcgcaa cgggctatac 240
 gactgataag ggtatgaaga ccaataatgg tgctgttcga gaaagtgact ttacgagag 300
 agtcttttca agaatagctt caaagcgctc tgacttttgg aaagaagttt ctgtaacctt 360
 aataatctct accaatgaca ccgaatccga taaaggtaat tcaatgtgga acgcgtttgt 420
 taccaaagac cgtcagttgt t 441

<210> 4259
 <211> 130
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-031-Q1-E1-B12

 <400> 4259

 ccacgcgtcc gcacacgcgt ccgcataaaa ggagtcgcaa ccatttaaaa agaaaaaaaa 60
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaataaaaaa ataaaataaa 120
 aatagggggg 130

<210> 4260
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-031-Q1-E1-B2

 <400> 4260

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cagcactctg cagaaaagag aanatgtana gtatagagtg tgcggcctgc canatagtag 120
agaagaaatc gatgaaagtg aaagcgagta aaagatgagg tatanagaat ggcggtccta 180
acggtaagga tccaaaggta gcgaagtaaa tagacgtttg aaaggcgtcc agtatgaaag 240
gagaaacgag tgtagcactg tctagtcgtc caactcagcg aaacagcaat aactgtgaaa 300
atgcagtaaa ctagcagtag gacggaaaga ccccataatt cttgactaga taggttttagg 360
gaggagagag aatcatgaag tagaggaggt ggggtaagag atgaaagacc actgcatgag 420
gataaggaat ctaactgagt 440

<210> 4261
<211> 444
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-B4
<400> 4261

cggtccgaca ttcccgggtc caccacgcg tccggagaag gaagaagcag agagggacta 60
tgagcgagaa ggtggatagt cgagagggaa aaagcccaga agccaagata aggtatcaaa 120
gtaaagaaag aaggaaaagg agaagaagag agggtaggct tagaagcagc aaaccagaga 180
ggaaagcgtt aaagcatgaa agaaaagaaa tccgaaaaag aagagaaaaa ggtaagaaag 240
aggaccgaat cagggttaaga ggtagaggag caagaagaga agagagaatg ctgggtggag 300
tagcgaaaca agagaaggga agtaaaaggt aagaagagg aaaggtttac gagagaagga 360
agtagaaaga agagagtgta aggcggcgtc ataatagaaa tccgaaagga gtagaagaaa 420
agagagagaa gaaagaaaag aaga 444

<210> 4262
<211> 389
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-B5
<400> 4262

cccacgcgac cgcccacgac gtcaggctag agaagagggt cgtatggcag ctctttagg 60
attcatcgaa ggtaacgacc cggaattgt aaaaatagct gtggatgcaa ttctggatct 120

tacgagccat ccagataatg cggaagtatt aagatcagag cgcggcctag taccagcact 180
 aaaagcccta gtcaccgact ttgatacaac agagggttgca acaaggcaat ctgcgcatgc 240
 ttgtttgggtt aacttggttg tcagaaattc agccgataac aacgcctttg tcgctgaaga 300
 attggcatcg tgggcgatca gaggtggttt aggatgaaag gatgcgtttg actcatccat 360
 ctcttcttcc attctaaagc ccacagctc 389

<210> 4263
 <211> 399
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-031-Q1-E1-B7
 <400> 4263

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 tgaagcgctc ggtttcaagg tccctacaaa ggggcttacc ctagatgata ataatagcac 120
 catgtacgac aaacacggag tctgtcctct gcagtcctca aggacgagaa cgttcctgag 180
 gatcacgccc atgagttgca agactattcg tccacagcca gtgttactg attctacaaa 240
 agtacatcgg tcatectgta actacgggtgt catgcagggc atactctacc tacaggatac 300
 gtattgcaca ccctaggaca atttgataaa agttctacgt cccattggc tttcgacaaa 360
 cttttcccca catccgaaag tgctgctcca cgaaaacaa 399

<210> 4264
 <211> 439
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-031-Q1-E1-C1
 <400> 4264

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 cttgcgtcat catggtatcc aaaagtaggg acgtacgtcg gagactaaaa gaaagggcgg 120
 caaggaaaaga agcccagttg aagaccatgt ctgataagcc atcgaagcca aagatgaagt 180
 ggtacccgac ggaagacaaa ccgagaaagc tattttttacg gaaaaaacg caaaagcgta 240
 ccaagttgcg ggcattcatc acccctggga cagtcttgat cctcttgtct ggccgcttcc 300

gaggaaggag gggtatcttt ctgaaacagc tcgcaagtgg actattattg gtgacaggac 360
cttttgagtt gaatggcggt cctctgcgaa gagtaaatca gcgttatgtc attgcaactt 420
caaccaaggt ggatatcca 439

<210> 4265
<211> 459
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-C10
<400> 4265

ggggccaccc acgcgtccgg atttctgtcg tccatcgtgg tagaatgagt aatcgtgttc 60
caaaagagtg gcaagaagaa gtttcccaag tattgtttga taaagtaact atacaaaaga 120
gaattggtga actagggaaa caattaagtg ccgactatca aagtcgtaaa cccgttctcc 180
tcggtgtatt aactggctcc tttgtgttct tagctgactt gattcgggct atgacttgtg 240
acctggagat acggtttatg agagccatctt cttataaagg aacggagagc acaggaaacg 300
ttaccatcga gggattagag tttctgaata ttgagtcacg tgatgttatt cttgtcgaag 360
atattgtaga tactggctctc acttttaaagt ggatttgtga caagttggag gagttgaaaa 420
ccaagtcact caaaatttgg acctttttgg tcaaaaaga 459

<210> 4266
<211> 358
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-C3
<400> 4266

gggtccacgc acgcgtccgc acacacgtcc gcaccaactt gtccgaatat acggtgcagt 60
tgatcagtcg agagtgggat attcaggaag taactggcgt atgtaagaca gtaacgggaa 120
caggagttgt tggtcagcag ccgataatgg agccaggtga aacctttaga tacgcttcca 180
aatgtcctgt tcgagttcct tcgttctttg atccgtcgaa ggacaagttt gtgggctcaa 240
tgcaaggaaa atatattttc attcgaggtg aagttggtga agaagcattt gaagttaaga 300
ttgctcgggt tggtttttat ttgaactttt cttgataaac tgtatagtat ttcatagg 358

<210> 4267
 <211> 413
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-031-Q1-E1-C5

 <400> 4267

 attccccgggt ccaccacgc gtccgaaaca atcagtctga taagagcact ttgaaagaag 60
 cggaggagaa gctgcagagt gcagttcata ctggaacaga gaaagtttct caggtgttga 120
 gcgacgtcaa ggaaactgtg acggagaaat acaaggaatg gacagcgcca aaaagtagcc 180
 aagaagaagc aaaagaaaaa gcacaagaag cgaaagaaga ggctaataaa gcttttaatg 240
 ctatgaaaga aagtgcgagt gccgcttcag aggctgcac agagaaagca gaaaaatta 300
 agcaggatgt gaaggagtga agatacacag tagttttctc ctatagtgtt ttagtagta 360
 tctgtagtga tatttgtctc gtgatgaata aaacacggtt attcgtattt cag 413

<210> 4268
 <211> 357
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-031-Q1-E1-C7

 <400> 4268

 gtaccgatcc agaattcccg ggtccacca cgcgtccggc aaatacgggc attccggcat 60
 acgtaccaat tatcgaacgt agaaaggata tgtcatatac agaacaagag aaacgatggc 120
 agcagcttcg tagaggaaga tacgtggagt ttaatttggg ttatgatcga ggaaccgtgt 180
 ttgggtctcaa aacgggcggt cgtattgaaa gtattttgat gtcgttacct ctaactgcac 240
 gttgggaata cgatcatcat cctgaagaaa attcaagaga agctcaacta gttcaagttt 300
 tgagagagcc taaagaatgg atatgagggt gcaatggcaa caatgaaagt ctcttgt 357

<210> 4269
 <211> 255
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-031-Q1-E1-C9

<400> 4269

gggtccaccc acgcgaccgc acgttgcccc gtttcgtggt ggatttcaac tcgtacacac 60

acacatacat atatatatga atgaaaaatg ctgcaaggaa aaaaaaaaaa aaaaagaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggaga aaaaaaaaaa 180

aaaaaaaaaa caaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gaaaaaaaaa 240

aaaaaaagtg aaaac 255

<210> 4270

<211> 444

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-D1

<400> 4270

gggtccaccc acgcgtccgt ggtgtgtttg ttgcggttga aagagagaga gcaaaaagta 60

ttggagtgtt gtaaaatgtc aagttttcta actcgagcag ccttgtcatt gcgtgggtgcg 120

atacaaaca caaaaacca gtggaccaac aatggagtag caaggagact ttatcacgaa 180

aaagtagtcg accattatga aaaccaagg aatttaggtt cgctagataa aaacgacaaa 240

tatgtgggaa caggtctagt gggtgcccct gcctgtggag atgtcatgaa gttgcaaata 300

cgagtagatg agacagggaa aatagtagaa agtaggttca agacatttgg ttgtggttca 360

gctatagctt catctttcta tgcaaccgag ttgattcgag gaaaaacctt ggaagaagcg 420

agtaaaatta agaataagga aatt 444

<210> 4271

<211> 465

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-D10

<400> 4271

gggtccaccc acgcgtccgc acacgcgtcc gccacgcgt ccgctcggcg tcgtccgtgc 60

agtatttcat tttgttacat cacctaaaga aaacaaaaga gagaatatat aaatgggtcg 120

agtgagaacg aaaacagtaa aaaagtcggc ccgagtgatc agcgaggaat actattccaa 180

gctgactctg gacttttcaaa cgaacacaag aatatgcat gaagtagcac tcattccttc 240
 caaacgactg cgcaataaga ttgcagggtt cgtaacgcac ttgatgaaac gtatccaaaa 300
 aggacctgtt cgtggaatat ctcttatact acatgaagaa gagcgtgaaa gaagaatgga 360
 ctttgttcca gaagtttcag ctatagatgt gggatgaagtc aagatcgatc cagtgaacaa 420
 aaatatgttg gaaccgttgg gttataaaaa tcctccgaat gtggt 465

<210> 4272
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-D12

<400> 4272

ggggccaccc acgcgtccgc acacgcgtcc gcccacgcgt ccgcccacgc gtccgcaacg 60
 ctcttccttg ccatgaaata ttgaagagt cgcttatcaa agatctcgac caacctccca 120
 acttttatga cggcaggact atgtttcctg tctgggtgca cgtttagtcc aaagagagat 180
 atatcatata aaaagtttat tcacccaact ccttcttcat tacttgataa tagcttgtgt 240
 gaacgaaaac tgaaaacctg ttccaacatt ctctatcgga tacgagccca acaacagaca 300
 gaaggaaaaa aagaagaaga aagaaccat caactcagt attacgagtt tgcagaacgt 360
 tgtatggatg gtggttgccc tgtggaggat gttcaagaac tcttgggtcg tttagaggac 420
 cgaagaaaaa c 431

<210> 4273
 <211> 456
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-D2

<400> 4273

cggttccacc cacgcgtccg cacacgcgtc cgcccacgcg tccggatatt cctcgcaacg 60
 aacaagcttt acagattgca ttagctcttc gtgatgaggt tgcggacttg gagaaggctg 120
 gttgtacat cgttcaaag gatgaacctg cgcttcgtga aggtttgcca ttgaagaagg 180
 aacgttgga tgaatattta gattgggctg tgaaagcttt tcgtcttagt acggtcggtg 240

cagcacccaa gactcagatt gtcacccatt tatgttatag tgactttcaa gatattctaa 300
aagccatcga tgagatggat gccgacgtat taaccattga gaatagtcgt agtgatgatg 360
ccatgttgcg tgcccttgcc aagtatggtt attcacgtga tgtgggacct ggagtctatg 420
atgttcattc accggctgta ccgagcatcg aatttt 456

<210> 4274
<211> 186
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-D7
<400> 4274

ttcccgcgtc caccacgcg tccgcccgcg tctagtatga aacgaaagtc gaattcacia 60
ctgtcaagtc atcaattgca cccatccatc aacacctgcg aacatgcagt ccaccatccg 120
tacgacggaa agattcgagg attcttgact agatacgttt acataggagg gacgtgtagc 180
attcac 186

<210> 4275
<211> 446
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-D8
<400> 4275

ttcccgggtc gaccacgcg tacgcccacg cgtccggtat ttggctgtga ttgttgctgt 60
tgtttggaga ccatggtttag cgccaccctc agtagtatgt ctagagccag cttatggctc 120
acaaggttct ttttgtacac agtcattctc ggtaagttgg tactttgggtg gtggttggtg 180
ttgtgggggtg gctcagtcgt ttttcaaagc cttttctatc gccatagatg gagtgatggg 240
aaaaaagggc gacaatgttt ggaatacaac ctttttatac aatgggaaag tcttcgactt 300
ttgcgcatat agtgccacta cgatgattgt tacaagcagt aactttatcg gaaactcaca 360
cacttgcatg tatgtcatcg ccttagcgtc gacgagcttc atcgtctatt ttatcctgtg 420
ggtgcttacc attgtggacg tctttt 446

<210> 4276
 <211> 349
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-031-Q1-E1-D9

 <400> 4276

 ttccgggggcc acccacgcgt ccggacgggg ataccggcaa gttttgagca tgccattaaa 60
 cagtagattc gtatgtagtt gtcactctgc tcgtagcgga aaactaaaca ggtggaacca 120
 aatgcaaaag cccgcaggta ctactaagat cgtacgataa tcacgcaggg gtggcaaaag 180
 tggactatgg gaagagaagc accagtttcc tgtaatcgtc aatcacactt gctaagtgc 240
 caggcaaacg ctccccaca tgatcacacc ttgtaactat aggtctcgaa ggaatctcca 300
 ggttgcaagg tagtagaacc taaaactggt atttttttgg gagcatcca 349

<210> 4277
 <211> 396
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-031-Q1-E1-E1

 <400> 4277

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 cgtacttttcg aaaaggagag cagttaggaa cccacgagtt gaggaaaagt ataagtaagg 120
 aagaagtgga aaaacttcga caagaaaaca gatctttgga ggaaaaaata aggagtggag 180
 agttttcaagg tctgcctgag atcctacaga atgtctggat accatcatgg aaaccggaaa 240
 acaatgttca taccattgaa agaccgcttc aggttccttt gaagagagaa aacaggtttt 300
 cggtaaagaa agaacaagct ttgccacca gtgagctttc cagttctgca aggtttgcag 360
 cacaccaca tcatgacttg accagaggga gatagc 396

<210> 4278
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-031-Q1-E1-E12

 <400> 4278

ggggccaccc acgcgtccgc acacgcgtcc gagcgctctt ttgaattatt ggaatgagcc 60
 ttttgtgatt ctggacgctt cttatccacc aagtacggtg gccaatatat tgctccaga 120
 acaactttgt ccatttgcag ttccagtaca taacaacaac gatggaacga caaagaaaaa 180
 tccggttgct ttaccgaaag aatatttaga agctgtggat gaaaaggcaa agtctgtaga 240
 cacactacga gaattggtga ggcaacaaca aggaaacttg gacttggaac gaactgtaca 300
 gcattatfff cgagaatggc tcatatctac aggaaatata agacaaattc atgacctcgt 360
 caagtggca gagtcttttg aataaaagtg gtgattttat gtaaaaa 407

<210> 4279
 <211> 220
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-031-Q1-E1-E2
 <400> 4279

ccgggtccac ccacgcgtcc gaatcggggt agaatgattc ggctgcacat ggattatcct 60
 tgtcttttaa tactgtttcg agttccgtca tttgctcttg tatgagtttc tcataacata 120
 aactctgttg ctgcgactgg ttggatgacg actcggcttc ttctgggggg caataccagt 180
 caaagtgctc cttactcgat tccgcatgaa aaactgagga 220

<210> 4280
 <211> 397
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-031-Q1-E1-E3
 <400> 4280

gcgtccgcac acacgtccgc taaaaatcga gaattggctc aaggctcgaa agaaaaccca 60
 tattacttgg ttatatttca gaatggacag ctgctttcct acagtcgttc cttgggaagc 120
 aggagagaat ccgtttatct gtcattgtta tggctctcat tatgacagta gagccacgta 180
 gtccgaggtc cagctctctg cttcccttgg ctctgtggat gggaggaaac attgttttca 240
 agactttaaa ggaaaagatt tccgcaaaga gtctgacctg tgggtggacat aagtgtggat 300
 acttagaata ggatttcgtt tgctaagtag cataaagttt tagtttgcca aagtgttaact 360

tacagggttt aaagttttca atccttttga agctcga

397

<210> 4281
<211> 472
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-E6

<400> 4281

gtaccggatc gagaattcgc gggtcgaccc acgcgaccga cgaagaagat ggtgaatttc 60
aagtttggga tatcgaacag aggaaacctt ttagtacagt tcctctttca tcttcacgtg 120
atgcagtcac tttggcatat tatccagaaa gaaatgtata ttttgtggga agtcatgttc 180
gcttgtatat gttggatcct cgagttggaa gacttcaaaa ttccgtatat tttctcaata 240
atttacacgc ttcacatata cgcagccttg tagttcgta tcacatgttg actattggat 300
ttggaacagg aaggcttttt ttctatgatt tacgcaaagg taatgagact cttgttcgaa 360
acggtcacgc aggacttcga cttggtcgtg gttgggttcg tcaagagaat caaacggata 420
gtccccgtcc tcacctcatt gaagactaca atcctgctgt atattgcatg ag 472

<210> 4282
<211> 411
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-E8

<400> 4282

cccacgcgta cgcacacgcg tccgggagac ccaaattaag gtgagagaat ggacgataag 60
gaactaggca aaaggatatg gtatctgcgg tagaacatat gacagaagca gcaccgactg 120
tttagcaaaa acacagcact ctgcagaaaa gagagggtgt acagtataga gtgtgcggcc 180
tgccaaatag tagagaagaa atcgatgaaa gtgaaagcga gtaaaagatg aggtatagag 240
aatggcggtc ctaacggtaa ggatccaaag gtagcgaagt aaatagacgt ttgaaaggcg 300
tccagtatga caggagaatt gagtgtatca ctgtctagtc gtacaactca gcgaaacagc 360
actagctgtg aaaatgcagt aaactagcac taggacggaa cgaccccata c 411

<210> 4283
 <211> 422
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-031-Q1-E1-E9

 <400> 4283

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 ctttgcactt cctatcggag tttccatctt ttcattgggtt ttcgctgggtt tgctagctgt 120
 cctggaacta gcacgagtag tatttgtttt cgaatccgta cttggaccac taaaaatgga 180
 actgagtttg gtctctttgg gagcagcagc agccccattc gttgttttgg aactatcgggt 240
 aactgttctt ttagactctc gcaaacttcg aacgctatcc atagttgtat aggaagacgc 300
 caacgaagag gctaatttgc tactgcgatc tgtataactt gtggatggaa ccggtggagg 360
 agcttttgctt cttgtagaac gaatagaaga tttgtcttca tcgttgctgt tgttgttgtt 420
 tt 422

<210> 4284
 <211> 455
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-031-Q1-E1-F1

 <400> 4284

 ggggtccaccc acgcgtccgc atagtggcaa ctccgctgtc ttgaaagaca taactgcaag 60
 tattgaaaag cctgacataa aatggataac taggacgaat ctcaagtactt gtctgaattc 120
 tgcagaagga aatgttacgg ttgacttgtc gcggcagtgt agcttgaagg atatattttc 180
 attgaagctt ctgcacaata actttaagtt ggcgtgtttt aatgatgcct tgttttttagt 240
 tttaccaggc ttatcctttg ttattactgg taatcgtata ttctgtagac gctcggactt 300
 gaatgaaacg gaagcattgg agtcctgctt ttcgtttatg aagatatgcc ccacgtacaa 360
 gtcgttgag attcttttgg aaggcgagca aatttatgta gaagaactcg tgcctattgt 420
 atttcgtttc gttgaagact ttcttcattt tcttt 455

<210> 4285
 <211> 420

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-031-Q1-E1-F12
 <400> 4285
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 gaaaagatat caaaaggaga aagtcttggg agaaggaact tttggaatcg ttaacaaagc 120
 aaaggatata aagacaggtc aatatgttgc tatcaaaaaa gttcgaatgg gaaattccaa 180
 ggatgggtgtt gcgataacctg ctctacgtga gataaaaata ttgcaagatg ttcgacacga 240
 gaaccttatt aacttggttg atgttttttg gacaagcagt aatatcaact tggatttcga 300
 ttattgtatc gcagacttgg aacaaattat caaggacaaa acgattgcac taagtacagc 360
 agaagtgaaa ggagccttga aaatgatact ttgtggagtt gcaaaacttc acgagcattg 420

<210> 4286
 <211> 453
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-031-Q1-E1-F2
 <400> 4286
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 acccgatatt ccacatctat aaatgtatgg tcggctgggt tgtattcttg gtgaaatgct 120
 gaacagaggc gttcctttgt ttagaggaac caattcaccc aatcaattgg aagttattgt 180
 caagttactt ggaaaacctg gacccgaagc aatatcgcaa gtatgtgtaa aagagtatgt 240
 ttcttatcgg attcttattt cagcaacaga ttcgtagcga tcgagcgaga gcacttctca 300
 tgcagatgcc tgctaggacg ataccaaaat tggaagaagt ttttcccaga gctcatcctg 360
 aagcccttcc cttgctaaag agactcttgg agtttgatcc gcggaagaga ccttctgctg 420
 cacaagtatt agatgatcct tactttgcca agt 453

<210> 4287
 <211> 364
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-031-Q1-E1-F3

<400> 4287

cgggtccacg cacgcgtccg catgcattga tgagacctgg tagatttggt tcaaaaataa 60
aaattggggt ggcaaaatta aaaaggaaaa acgcaaattc ttcgaattca tgcaaaaagt 120
atgaattgtg aacgcggaat tcgctttgaa ctattggctc gtttatgtcc caacacaaca 180
ggtgcagaca tacgaagtgt ttgtacagaa gctggatatgt ttgctataag agcgagaaga 240
aaaacagtga cagaaaagga ctttttataa gctattgaca aagtagtcaa aggatatgcc 300
aagttttctt atggttagcaa atatatgata ttcaattaaa acggtattcg ttatattcga 360
aaaa 364

<210> 4288

<211> 335

<212> DNA

<213> *Cyanidium caldarium*

<223> Clone ID: LIB190-031-Q1-E1-F4

<400> 4288

cgggtcaccc acgcgtccgc acacgcgtcc gcctgaatgc tattttacca ctttatctta 60
acggccaaat tttaagaact cttcaagaat ccgtagcatc agagttggcc agtcgaatga 120
gtgccatgtc tgcagcttca gacaatgcaa aggagttggc gaaagcacta actcttggtt 180
tgaatcgagc tcgtcaagct gcaattacgc aggaaattgc tgaaatagtg ggagctgcgt 240
cggeactgca gtgaagtttc gttctcaatt gttggggaat actttgggat agcgtggaac 300
tttatataaa catagagtta tctgcaatat atagc 335

<210> 4289

<211> 471

<212> DNA

<213> *Cyanidium caldarium*

<223> Clone ID: LIB190-031-Q1-E1-F6

<400> 4289

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gtgtagcact gtctagtcgt ccaactcagc gaaacagcaa taactgtgaa aatgcagtaa 120
actagcagta ggacggaaag accccataat tcttgactag ataggtttag ggaggagaga 180

gaatcatgaa gtagaggagg tggggtaaga gatgaaagac cactgcatga ggataaggaa 240
tctaactgag taaggaaaat aagcttaagc tagtttggct ggggaagtaa agcctaagaa 300
agagtaaatt aggcaagcaa aggcattgaga gaagtataat agcagaagca tgcttgaaga 360
aaaagaaaga gatttcagaa agggaagaaa agtcagctat agagaacagg tgaaggagaa 420
ctcaaaaaga ggagagcacc gaacgatcga agaagaaact ttggggggta c 471

<210> 4290
<211> 205
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-F8
<400> 4290

aattcgcggg tcgacccacg cgaccgatgc tttgaaacgc cagggtcgta cgttgtacgg 60
ttttggtggt taagaggcaa acaaaaacat ggtgtttttc aacaccacca gttgtgaaag 120
aaacttgggt ttcagtctca gtagaccctt ccttgtttat gaaattagag ctttgcaaatt 180
ataaaacact ttcttttttac gttgt 205

<210> 4291
<211> 434
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-031-Q1-E1-G10
<400> 4291

gggtccaccc acgcgtccgg aatatttttg gcaatatcaa ccgaagactt gtcattcact 60
cggcattcaa atgcctgaga gatatgcgaa tatcggagca gacttctttc cagattggta 120
tatactaacc aagtgcgacg ttttggctat tagtaactct acgttttagt ttaccagttg 180
tttgttgaat cagcgaaaaa accccaagtt ttatagagct cattaccttt atcgcattat 240
tgaaatagat ccttggaata cagaccaat tgtgcacaag gaggttcccc ttccctttgg 300
gaagaggata tggaatgata tattgttggt gtatcgacaa caaggaataa gaggactttt 360
gagaaatata ttttggggat ttccctttgta tagaattcgt tcacttttga ttggaatggg 420
cctgggtttt cgaa 434

<210> 4292
 <211> 377
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-031-Q1-E1-G3

 <400> 4292

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 tggaactggt tccgagaaac cggtaaaaac tgttttccac aacttgtaag ggaccggaaa 120
 gtttgggcca ttcaaccaa ttgggatccc gttccaaggt tgtaaagggtc aaaccaaagg 180
 aaaccaaagg gacaccattt caaggaccca attataccca agggaaaaaa tttgtggtac 240
 cacaaattcg ggtgcaacaa acaggaacaa ggtttctccc cggttatggt attggtgtgg 300
 ccagggattt taccctcaat gctttgcacc ctggtacact tatttttgaa aaaatccgca 360
 ataaaaatgg gaaaaag 377

<210> 4293
 <211> 441
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-031-Q1-E1-G8

 <400> 4293

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 ggtgaagatg gaagtgtttt atttgaaagg gatctgcaac caggcgaaga ttttagtggt 180
 gcgctggagg aatggaatga agaaagaagc aatttgggtg atactgttgt agaagcaatg 240
 aatcctgaac tagattgggt acaaatgat gttgaagaag agaaagtctc tgtgtctana 300
 agaattccca agtggattgc agacgatgtc gatttggatg aaagttaaga agaagaggaa 360
 gaggacgaga cgaccacaga tgagatgttt tccgaaggaa gaagaaagtt gtaaaaagct 420
 gaaaacctgc actagttttt t 441

<210> 4294

<211> 382
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-031-Q1-E1-G9
 <400> 4294
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 tagacgttct gaaaggcgtc cagtaggaaa ggagaaacga gtgtagcact gtcgagtcgt 120
 ccaactcagc gaaagagcaa taagtgtgaa aatgcagtaa actagcggta ggacggaaag 180
 accccataag tcgtgactag agagggttag ggaggagaga gaatcatgat gtagaggagg 240
 tggggtaaga gatgaaagac cactgcatga ggataaggaa tctaactgag taaggaacat 300
 aggcttatgc taatttggcc ggggaagtat agcctacgaa agagtaaatt aggccagcca 360
 aggcattgaca aaaatatcgc ag 382

<210> 4295
 <211> 398
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-031-Q1-E1-H11
 <400> 4295
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 agcaatgaat aaagacttga tttggcaacg tccaagtttc tggttcaagg ttgcaggttt 120
 tagtggagca gctgctgtag gtttgggagc ctttgggtgct catggactcc gggcaccagt 180
 cacagaccct tatttggttag aaatatggaa tcgtgcggca agttatcacc agatacatag 240
 tttagctggt tgtgctgcag cctgttgtgc aaataccgag ggaaaacctg cttttgtagc 300
 agcgtcgttg ttctctcttg gaatagcgtt gttctctggt tcctgtatg ctttgacttt 360
 aactggaaac cgaaaacttg gtgcaattac cccgtttg 398

<210> 4296
 <211> 460
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-031-Q1-E1-H3

<400> 4296

gggtccagcc acgcgtccga atcaatgtaa gatgttgaga ccgcagtacg aaaaagttgc 60

aaagacttat cgccatgtga aaggagtggg gattgcagct atcgatgccg ataaatatgg 120

aaagattgca gaaaagtatc gaatcactgg gtttcctaca ttgaaatatt ttccagctgg 180

gaaagataag aaaccgatgg aatacgactc gagtcggatg gcagtagcta tgggtggactt 240

tatgaatcgt caagttgggt tggatatcga attgggagga gacgagttgg tacaagatgc 300

tggaagagtg gaagtgatgg atacttttgc acgcgacttt atgcagtcga ggaatgaaag 360

ccaacgcgag tcgattcgtc aagctgcgac cgaagcattg tcctcggatg cttcgttgaa 420

aggtcaagta ctacaaaatg ccaagtttta tgtgacggtg 460

<210> 4297

<211> 462

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-H5

<400> 4297

attccccgggt ccaccacgc gtccgcacac gcgtccgcc acgcgtccgg gcaatcattg 60

actttgcaag tggaaagata taacactgat aagagaaaga tggaaattga tgaaccgcac 120

tttgaatgaa aggatacgtt tgtcacactt gctatgttag tactgggtga agtgtgcatc 180

ttcgagactt ttctaaaagt ggttgagagt gattttgcta aacagtggat atcgatcatg 240

aaagatgtca cgaagtaagc tgttgagttg ttgtactttg gaggtttccc gttgatgaca 300

actgtatcag ttgagtcatt tttattgtgt tgaagctccg tttcttggag aactgatatt 360

tatgaattaa gtatatatgt accgtgctaa ggtaattggt aaatgcttgg tttcatgata 420

gagagataca gcataaacag cttacatagt taatttgctt cg 462

<210> 4298

<211> 447

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-031-Q1-E1-H6

<400> 4298

ggggtccaccc acgcgtccgc atgaatagag agcaaacaat atctgagaag cagcaacagc 60
 agtcgaagaa ttttcgtttg ggaattgtga ctccaaatat ggcaagtgga accgctgatg 120
 taggtctgat aggcttagct gtgatgggac aaaacttggc actgaatatg aacgaccatg 180
 gatttaaagt agcggttttt aacagaactg tctcaaaagt agacgacttt cttaacggag 240
 aagccaagaa taccaacata gtggggggcgc actcgttgca agagttttgt ggtcttttga 300
 agaaaccag aatcattatt cttcttgtca aggcgggtga agcagtagat cagtttattt 360
 ctatgctcgt gccacttttg tctagtggcg atctcatagt tgatggggga aactcccact 420
 ttcttgaca cagacgatga acgaaag 447

<210> 4299
 <211> 464
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-031-Q1-E1-H7
 <400> 4299

attcccggt ccaccacgc gtccggaata atatagccgg aaggagatca tcttactcta 60
 ctacgggtat atgaagcttg gaaagccaac aattattcta ctgcttggcg ttttgaaaac 120
 tttattcaag cacgttcttt aaaaagagct caagacattc gcaaacaatt agtagctatt 180
 atggaacgac aacgattaag tttggctctg gcaggaagag cctacaataa gattcgtaaa 240
 gctatcgttt ccggtttctt tatgcacgca gcaaagaaag atcctcaaga aggttatcga 300
 acgatagcag aaggacaacc tgtttatatt catccttctt cctcgttatt tcatattcaa 360
 cctgattggg ttatttatca tgaattggta caaaccacga aagagtaggt agatgttctt 420
 gtgcttagca ttctttatga ctcaaatatc tattctctag atat 464

<210> 4300
 <211> 379
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-031-Q1-E1-H8
 <400> 4300

ggggtccaccc acgcgtccga acgcaaattg ttttcagaac agcaagagaa gaagaaactt 60

gtgaatagaa tagaagaatt ggaacattat ttggaaagaa tcaacaacaa taaggaaagc 120
agcaataacct tgtcgatcatc accacaagaa aaacaagata attctttccc aagtgcatt 180
gttcgagaac aagaacaaca aattagtgtg ttatctcaac agttggcaca acgtgataat 240
actattcatc agttgcaatc tcagttatcc aatgctttac aagaacgaga acaacatgag 300
caacaacagc agtcatcttg tttgtatgaa cataacatga aagaatatga agagaatatt 360
cagtcattgc agtgtcaat 379

<210> 4301
<211> 291
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-032-Q1-E1-A6
<400> 4301

cgggacgacc acgcgtcggg taaaaagtgc aagtgtggga tttcagtgc ggtatcgaca 60
atgcaagcgt tttggcccaa ctaatgacca aaaaagatga caagaagcag aaataaaaaac 120
cgcatttact cttcttttag ctttaagaaa aagaggaatg agaactggtg agtacgttgg 180
aaagtgcgcg gaaaaggggg gcggccgcac aggaggatag atgattacgt acgggtgaag 240
gcgacgtaag agttcgaaaa tgggtgtcagg aaaaattcaa gtcaggggtc g 291

<210> 4302
<211> 181
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-032-Q1-E1-A8
<400> 4302

ggaattccgg gacgaccacg cgtcgggcca cgcgtcagga tgtcattgga gaggatatgc 60
atgcatgtgt tttcgtaagt ggagcagcga tgcttcaaac agtcgcaaat aggactgagc 120
taaagtcaat gaaaagctcc ttgagacttt gtagtggtgt gtttgttccc aaacagagta 180
a 181

<210> 4303
<211> 326
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-E2

<400> 4303

ccacacgtcg gacagaaaca actggaatta ccctagtagc ggcgagcgaa gcgggaagag 60
cccactatga gaatcctctt tttcttttga gaaaagaaga gatgtatttg aaaaaagaca 120
agaaatatct gcagcaagaa aagagcaaat ttcctggaat ggaatatcat ggagggtgag 180
aatcccgttt atctcttttc tttgtatgga agctgcgtta cgatatttcc tgttgtggag 240
tcgggttggtt tggtagtaca gccttaattt tgtgggtggt ataatcatc caaggctaaa 300
tacgtaaaga gagaccgata gcgaac 326

<210> 4304

<211> 378

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-G5

<400> 4304

accacgcgtc gcggcaaagt atagagtgtg cggcctgcc aatagtagag aagaaatcga 60
tgaaagtga agcgagtaaa agatgaggta tagagaatgg cggtcctaac tgtaaggatc 120
caaaggtagc gaagtaata gacgtttgaa aggcgtccag tatgaaagga gaaacgagt 180
tagcactgtc tagtcgtcca actcagcgaa acagcaataa ctgtgaaaat gcagtaaact 240
agcagtagga cggaaagacc ccataattct tgactagata ggtttaggga ggagagagaa 300
tcatgaagta gaggaagtgg ggtaagagat gaaagaccac tgcagtagga taacgaatct 360
aactgagtaa ggaaaata 378

<210> 4305

<211> 450

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-032-Q1-E1-H7

<400> 4305

ggaattccgg gacgaccacg cgcccgcaat gagcagattg agcatctcac tcgagaattg 60

gagttatctt catcaagggt agctatattg aaaaacaagt taaagttggt acagcgaagt 120
 tgggaagtag atttcagtga gattaacaaa ttagaaaaga ttggatccgg tgcctattca 180
 gaactattta aagcagaatg gagagggcac attgtagctg taaagttgat gaaagctcaa 240
 gaaactcgga agaactcctgc gtcatttcat gacaagtga acacttcaag tgaacatcga 300
 tatgtttatt atggcgctgt gaggcacaat tccatatacg atttggttga gatgtaaagc 360
 tgaaagcctt gaaatgccac aattgaactg agaacacaag actgttgcac aaatacacca 420
 gtaacaactc tcaaactatga cgtacgcaaa 450

<210> 4306
 <211> 378
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-033-Q1-E1-A10
 <400> 4306

gatggctggt tgcaattcgc ttgtggcgtg tgaagttttg gttaccttga aataatgcag 60
 atatttgtaa agacacttac aggcaagact ataactcttg aagtggagcc ttcagatact 120
 attgagaacg tcaagtccaa gatacaagac aaggaaggaa ttcctccaga ccagcaacgt 180
 ttgatatttg ctggaaagca actagaagat ggtcgtactc tttcagacta taatattcaa 240
 aaggagtcta cccttcactt ggtattgcgt ttgaggggtg gaatgcagat atttgtgaag 300
 acacttacag gcaagactat aactcttgaa gtggagcctt cagatactat tgagaacgtc 360
 aagccaaga tacaagac 378

<210> 4307
 <211> 388
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-033-Q1-E1-A6
 <400> 4307

ggatatccgg atcgaccacg cgtccgatca tattcaatac tgacatggtg gaaactttag 60
 agttggaaaa cttgttgcaa aatgctttga ttaccatata tggagcagaa gcacgtcatg 120
 aaagtagagg tgcgcatctt agagaagact atcctaagag ggacgatgag aactggatga 180

agcacactct cggttggatt tcctctccta agaagccttt tgtttcagga gaccgaaaag 240
 catatgtaaa actggattat cgtccagtga tatcggaac gttagatagc acagagcaag 300
 aatcttttcc tcctgctcaa agagtttatt agatattatc atgtagaaag ccgtattctt 360
 ttgcaaataa accgaagagt gcatgaaa 388

<210> 4308
 <211> 315
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-033-Q1-E1-C10
 <400> 4308

gggtcgacgc acgcgtccgg acattaaatc ttcaggtcct catttcttgg ttgaacatgt 60
 gaaacgcact ttaggaatgg attttgcata tggaaatact ttcgaaaccg atgcaatggg 120
 caatttcact ggggaaataa gtcagcctat tgtgaatgcc agtagaaagg cagatttact 180
 gcaaatgtta acgatgcaag aaagaataag tttggaacaa gtaattgcag taggtgatgg 240
 acccgatatc ttagaaatgt tgtctcttgc aggaatggca atatctgtcg atcaggtatg 300
 gtattgtact cgttg 315

<210> 4309
 <211> 207
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-033-Q1-E1-C11
 <400> 4309

ggtccgagtt tacgggtcca cgacgcgtcc gcacacgagt ccgcccacgc gtccgaaaaa 60
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
 aaagggcgga cgcacaaaag gataaaaggg tgggggtactc ttgcatgcaa cgtcatacct 180
 cggggggggt gtcatttaaa ttcaatt 207

<210> 4310
 <211> 402
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-C9

<400> 4310

ggtcgacgca cgcgtccggg tggccaaaac caccaaaccat ggcgagttgg attcgaagtg 60
gttttcgtgt cacgaaacac attaccaaca agacaaatag aatattccaa cgaggaaaaa 120
cggcgcgttc caaatcgacg accactgggtg atcgaacctg gttagccatc caagactata 180
gccatcaaag gtttgcttgt cggaatattg caaagagaag tccaagtatc tccgacacta 240
tttccaagaa taattgtgtg gtgagggact ctggctgtgc ttctcttgca actgctgctg 300
cggactcttc caccaaagga ctgcttgtc tcgaggccgt agaaggaaaa gctgcatcgt 360
tggcaaagtc tttggccgtg ttgggtaaaa atagtgatgt tg 402

<210> 4311

<211> 482

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-E11

<400> 4311

cgggcccggg cgagattacc gggtcgacgc acgcgtccgc atcttagggg tttattggat 60
actctacatg tctcaatcag ttcgtctatt cattggaaac ttgtcgtgga agactactag 120
cgaaagtctg aaacgagcat ttcaaaatgc cgtcgggtgca gaatcaagtg ttgtaaacgc 180
acacgttgct atggatagat attccggacg ttcaaagggt tttggatttg tgacctttac 240
ttcaccagaa gaggtgcct cggcagtgaa tctgcttaat ggaaaggaag tcgatggcag 300
agcaataagg gtggacttgg cacacgaacg tgaagaagga gcttcgcgcc aattcagaag 360
gaacgaagtg gaagatgagt agcttttagg ataccactgt ctgttgatag aacagacact 420
gctcggatgc gttatttgta gccagtcctt acagaataaa gaccacaagt gcgattcccc 480
tt 482

<210> 4312

<211> 427

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-033-Q1-E1-E12

<400> 4312

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tgaaatagtg cagcaagtaa ccaacgaaaa aaattttaca ggatgttttc aggactctt 120
tgataaactg gtggaagaaa gaggcgggcc acaactccaa atggtatctt tcaacgctca 180
acaaggacag cttccagcgc ccgacgaaaa cttccacgct tatctagtaa ctggctcggt 240
ctcttccgct tacgagaaac gaccctggat tgagaaactt ggacagtttt taaagcatac 300
atacacaaca acccaagttc ctttgatcgg aatttgtttt ggacatcaga tgttggcaca 360
ggcactanga ggactttcgg aactttgtaa aaaggggtcca gaggttggtt tgagtacatt 420
tacacca 427

<210> 4313

<211> 439

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-F12

<400> 4313

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cggggggtgat atacataggt cacttaccgc atggttttta cgaaaaccaa ctaaaggggt 120
ttttctctca gtttgaacc gtgctgaaag ttcgagtggc aagaagcata aaaacttatac 180
gaccaaaggg ttatgctttt gtgatgttcg cgaaccgaga agttgccgaa attgcttgta 240
gagctatgga cggttatctt atgtataaca aaattttggt ctgtaaaatg gtaccaccag 300
agaaagttcg cccgaatatg tttagaaagt tcgtgaagat tccctggaag aagctagaaa 360
agaaccgccg tgctttgccg ctcaccgaag accggttgaa gagactcaag aggaaacaac 420
ataaaagaaa caaagagct 439

<210> 4314

<211> 441

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-033-Q1-E1-F9

<400> 4314

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 aagaacaaga actgattgcc gatataaaag gaagaacgga ccgagtttta caagtcgata 120
 ttgctggagt attcttctct gccgtttttt caggagtttt gatgattcct gccttttttg 180
 cgttcaatat gttaattcca atagagcatt tgaggaacgg aagtacttat tttttcattg 240
 cggtagtaat tctttgtttc gtagctattg ctgttctggc cattctgtat gtaaggtggc 300
 ttaaaggaaa tgaaagaatg cgacttgagt tgctgttggg caaggagaag acagcaacaa 360
 taacaggaac agtgaatagt tagaaacgtt gatattcgta gatattcact acttttaaaa 420
 ggatcttttt ctgcgttctc c 441

<210> 4315
 <211> 433
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-033-Q1-E1-G11
 <400> 4315

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 cccaaatctc ttcattgttt tgtgccgtgc aagagcagca aacgctgcac gcatacaagc 120
 acttgtttga gagctcaa ataggcttct caagtcagtg aagtacagca cgccagtttc 180
 gatgagtgt tacctctggc tagaaatata tgttttcgcc tgcaagagga gcctcaagat 240
 gacgaagctt atgaagtttt aagggaatg ttatcacgag aagaaggcgc cagagctttt 300
 ttggttgaat atctttctga ctttgagtta cgcttagcag ataaaaaacc accatttaag 360
 ctagagaagc ttctgaagga ttgtgatgag catgtaccta atctccttgc tagaaatctt 420
 gcaatgtcag ttg 433

<210> 4316
 <211> 203
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-033-Q1-E1-G12
 <400> 4316

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atgcctcgag cacgtaaagt tgtgtctcgc tcggttttta gaaggttaacc aaaccagaga 120
aaaccacccc cttataagga tgggccaact caaacctcca ataacgcaa aagttccacc 180
aatgccaaac cacatagata tcc 203

<210> 4317
<211> 379
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-033-Q1-E1-G5
<400> 4317

accacgcgtc cgactcaaag gaaaaggata cgagtcaact gaaagcggag aaatattata 60
tatcggaagg tgtcttttga gcatttcatg agttacttac cgagactgtg aatgatttat 120
gtccgtatcc gcttattgaa aacaaggaaa aagggtccagt ttctttttgt tctatttatg 180
gtccaagcgg cgactgtttg gatcatatct ggtctggagt gttgccagtt ttgaatattc 240
acgactatat tttctttcca aagattggaa gctttctatc cttgggttta cggaattta 300
atgacttttc acgcaaagta gatactcggt atatcggtac tttgtgaata aaaaacaacg 360
agttgtttta ttcaacaaa 379

<210> 4318
<211> 428
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-033-Q1-E1-H10
<400> 4318

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cgtcgcgtcg aagacggaca tcctgtctgc atactttggt aattgctttt acaagtaact 120
gcaacaaaaa atttcgtata atggagcctc ctttttggtt attaaagtcg cttacaatc 180
aggcaaatgc tatagtgtt ccaacgaaaa gataggattg caactcttca attacaacct 240
agaatagctt atttgaaatg agaattcaag atggtttacg ccaagcaggt cggaacgccc 300
caacaaacaa agatagcttg ttgagaacca aaagggtcgag gcgaactctc gtctgctttg 360

agaaagcatt ctgaaaaaat gggttactag gcacaaaaca aaagtaaadc ctaattttat 420
tcattcac 428

<210> 4319
<211> 311
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-033-Q1-E1-H11
<400> 4319

cgcgctccgcc aacgcacccg cccacgcgct cgcacacgcg tccgacaagt gtcgctcagta 60
aatgtctctg tcttttcctt ttgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
gaaaaaaaaa taaaaataaa aaacagaacg aaaaaaaaaa aaaaataaag gaaaaaacca 300
tgagaagaca g 311

<210> 4320
<211> 366
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-033-Q1-E1-H5
<400> 4320

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ttttctggca gacacccgga gattattcca ttggtttccg ctattgctct gtgtggagtt 120
tgtgcggttt ttgtgagcat cgacaacttg tttataatc caaccgtggg agctctcaag 180
tcagagcggg aagcgtattc gcgcaatgag aggcaacgtg actatgaaga cagacccttt 240
ttgaagctgg tgaaaccact tcgtgaccgt cctatcagtt ttatttcccc aaatgatgaa 300
aatagcagga ttcctcatta gttggatagt aaaataaata gttgttgagc tttaaaaaaaa 360
aaacaa 366

<210> 4321
<211> 144
<212> DNA

<213> Cyanidium caldarium
 <223> Clone ID: LIB190-033-Q1-E1-H9
 <400> 4321
 ggtagcgata ttcttattta aaaaaaaaaa 60
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
 aaaaatacac ataaagaagg cgac 144

<210> 4322
 <211> 446
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-034-Q1-E1-A10
 <400> 4322

ccgggtccac ccacgcgtcc ggacatcgct acgggaaatg gagtcaaagg caatccttgg 60
 tttctgtgta ctttaggaat ggcaagatat tactttgaat tagccaaacg attctcggaa 120
 tatgcaacgc tgaatatatc ttctcgttgg atgctacctc tattagaaca ttgcggaacg 180
 tcttatttca agttgaatcc atctatgcc a tccacttttc atgttggaga gactcttcag 240
 aagccacaat tgtgtcagat tgcacaagct ttgttaacag aagcggataa aattctgtat 300
 tctgtttatc gtcattgacc agattcaggt atgttgacgg aagaaatcaa caggtatacg 360
 ggattcgaac aaggagcaaa aaaccttaca tggagttatg actcgtttgt tactgcagtc 420
 tggagcagga attattcctt gaacac 446

<210> 4323
 <211> 382
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-034-Q1-E1-A11
 <400> 4323

tacggtccta aattcccggg tccaccacg cgtagcgagg aaagaacgtt tcagttcaaa 60
 gcaacttata ttcaatagta atgacgccac aaggagcagat aagcttgtct tatacagaca 120
 agtgctcttg gaaaattcga ccagtttact tcaaattgtct ttccgtcaac tttgttcaa 180

gtctatgtgg aagagaaaag agagaacact gtatttgaaa gctgacctag tacaactgg 240
 gcgtcttgcc gagttgaggt gaacaattta aatgaaatga atagtctcat gtaccggaat 300
 aggttcacag gtaatTTTTT tagcagtcac gtggtttcct gacgatggaa actcgcaaag 360
 aaaagTTTTT tgatcaatac ag 382

<210> 4324
 <211> 462
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-034-Q1-E1-A12
 <400> 4324

taacggtcog aaattccccg gtccaccac gcgtccgctg gaatttccag tgccttgcg 60
 gtcacattat tggcaggaat tccactgaca cacaagttt ggagcaaaag tgtgacacta 120
 gcaactggac atgatttgtc acagttagac tttgagtggc tggcaaagtc ggaaacttta 180
 gttttcgtca tggcaaccag gtcattatct gaaatagcac aaagactagt agaaaatggc 240
 aaatctcctg atactctcgt agcagtaata tacaatgctg gaatgtcgaa tcaacacgaa 300
 agctttggca ctttgaagga gtgggcattg ggaagttaa aggtctgttt tgaaccagga 360
 acggttatca ttggaagagt tgttcagtac gcctttgaaa aggagacctt ggctccatag 420
 gaggagcttt gtagtcattt ggagttgcat atttggagaa aa 462

<210> 4325
 <211> 330
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-034-Q1-E1-A3
 <400> 4325

ctgttttctt tattttgagt gtccctgttt tccttgcggt atgcaggata attacttgat 60
 atctagtgtc gtcgctgag atagagtgtt actcgtttgt atcgtgagca taaacaacag 120
 gtagttccta aaaaaaaca cataacagag agggagcaca gacaatcaga agtacaaaac 180
 atacaactag ggggggtgggc tgatcaacaa aaggccagat gaataaaaaa aaaaaaaggg 240
 gggccgccca agaggatcaa accttactta gccgtgcatg caacgtcaaa gcccttcaaa 300

aggggcacca aaattcaatt cacgggccgt

330

<210> 4326
<211> 397
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-A7

<400> 4326

ccacgcgtcc gacagaaaca actggaattc acctagtagc ggcgagcgaa gcgggaagag 60
cccactatga gaatcctctt tttcttttga gaaaagagga gatgtatttg aaaaaagaca 120
agaaatatct gcagcaagaa aagagcaaat ttcctggaat ggaatatcat ggagggtgag 180
aatcccgttt atctcttttc tttgtatgga agctgcgtta cgatatttct tgttgtggag 240
tcgggttggt tggtagtaca gccttaattt tgtgggtggt ataaatcatc caaggctaaa 300
tacgtaaaga gagaccgata gcgaacaagt accgagagga aagaggtgta tgatgcaggc 360
aaagaagtga cgcagtagat tagagagtaa cacatgc 397

<210> 4327
<211> 439
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-A8

<400> 4327

ggaatcatgg gactgaccac gcgtcgggca gagttaacta atctctccag atgaaacgag 60
aatgagtagc tgtagccaa aaaagtgcaa taaatactca aagttttcaa tttattattt 120
ctgagaaaga agaagaatga gaacgaggca ctattctaaa attatgcacg accctcgcaa 180
gcccatttgg agtagaaggc ttttccgtgg tttgtggttc cgagagcgga gaaagcgctc 240
tatcgaacgt gattatggaa ctcttccgtc tccagcccc ttgaattcct atacaatgta 300
tggtggagca acggaagcgt tcttactttc ggcctttctt agtttccttg tactaagact 360
aacagatgta aaggacttgt tgggtcttta aataaatctt gagtatcttc gtatttataa 420
gtaacgcgaa cggttgaat 439

<210> 4328

<211> 455
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-034-Q1-E1-C10
 <400> 4328
 gtccgaaatt cccgggtcca cccacgcgtc cgcaacttct ggtctatcca ataaacttgc 60
 tgccggtatt tttggtactg ctgttgcaac catgggaatg ttatctacga gttgtttcat 120
 tttggcaatg gatgttttcg gtcctattca gataatgctg gaggtattgc agaaatgtca 180
 atgcaaccgc cggaagtacg agaaattact gatcgtttgg atgcagtcgg aaatactaca 240
 aaagcattga ccaaaggtta cgcagttggt tcagcagctt tagcggcatt tttgctgttt 300
 cgtgcttata tcgatgaagt gaacaactac ttgccgtcaa atcgtgctct tacttctgtg 360
 gacttgagtc aaccggaagt gtttgttggg ggcattgatg gtgcaatgtt agtggttcta 420
 ttctcgggct tagctatacg tgcagtcggt aatgc 455

<210> 4329
 <211> 460
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-034-Q1-E1-C11
 <400> 4329
 ggtccgaaat tcccgggtcc acccacgcgt ccgcacacgc gtccgcccac gcgtccgtat 60
 ttaatttgtg gagaaagcgg tggtgggaag ttttcattat tgcgaacttt agctggtttg 120
 tggaacgatg gcgagggaaa gattagtata ctttccccag agagtacctt tttggtgcca 180
 cagaagcctt acattgttct tggtcttatt ttagagaaca tactatatcc aaagatggat 240
 aactttgata ctttctccag tcaagacatt tcaagattgt tagaagaggt caatttgagt 300
 catttaattg aacgtctggg tggcatcaat atttccatgg atttaagcaa catcctcagt 360
 cttggagagc aacaacgact ggcgtttgct cgtcttttgg caagtaaacc aaagtttggt 420
 ttcttagatg aaagtacaag tgcactggat gaggacaatg 460

<210> 4330
 <211> 346
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-C12

<400> 4330

attccccgggt ccacccacgc gtccggatcg ttccagctta taacttgcca cctaattgcag 60
aacatatcaa agttctccga gtagtaattc gagaaacttt ttccagagat ttgtgtgata 120
tggttgaggag agatttaattg tggacgttgg aagaactgga cagaaaaact ccagattcta 180
tccatcatgc caggggaattg ctgctggaaa ggaatcggca aaaacacaaa gcatttgctc 240
atatggagcgc ccaaaaacag aaaaccaagg gagtttgta gttttggata aaggactgtt 300
gttggtgttg tagtgtttta tgaaggatat ttgataattg caaaaa 346

<210> 4331

<211> 429

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-C9

<400> 4331

tatacctaatt gcaaccatct taaagaaagc agaattacag cttgcattgg tatccatagg 60
attaccagga tattatgtct cgttgtttgc agtggacaag tttgatcgga aaacttggca 120
aatatttgga ttgtttatga tgggtggtat aagtattgtt attggagggtg ttttgcccta 180
tttgaagtct gtgcctgctg catttattat aacatatgga atatatttct tcttttagtat 240
atgttgagag tgcactacct atatgattcc atctgaagta tttccaactg ttcttcgtgg 300
cactttttat ggaatagctg ctgcgtttgg aagaacaggt gctgttggtg gaactcaaatt 360
atgtgaacct attcaaaagg cagttgatac tcatagtcatt agcaatattt taggtgctcc 420
agtagttttt 429

<210> 4332

<211> 273

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-D10

<400> 4332

ttccccgggtc acccacgcgt ccgcacacgc gtccgcggtac gcgtgggcga gaatcgattt 60
 actcttttttg gcgccaacac agaagtcact gtggaagact taaaacttcg gatctatcag 120
 atgaactaca cgtgtcacgc tggttcctct cttaataaac gaaaatcggg ttctaagatt 180
 tggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaatg gaaaaggaga aaaagaacta 240
 gaaaaaaaaa acacgggggtg gtagccacgt cgg 273

<210> 4333
 <211> 446
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-034-Q1-E1-D12
 <400> 4333

attccccgggt ccaccacgc gtccgcccac gcgtccgccc acgcgtccgc ggacgcgtgg 60
 gaaaaaggta agaaagaggc aaatacggga aagcagtaaa agaagaaaga gaaaggaaaa 120
 aactgagtat caggaagaaa agaggagta gatgaggaaa gaaagatcaa ggaaaggttt 180
 acgagagaag gaagtagaaa gaagagagtg taaggcggcg tcataataga aatccgaaag 240
 gagtagaaga aaagagagag aagaaagaaa agaagagaaa agccgtactg aagaccgaca 300
 cagggtactcg aggagaaagg agacccaaata taagggtgaga gaatggacga taaggaacta 360
 ggcaaaagga tatggtatct gcggtagaac atatgaaaga agcagcaccg actgttttagc 420
 aaaaacacag cactctgcag aaaaga 446

<210> 4334
 <211> 231
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-034-Q1-E1-D9
 <400> 4334

ggtccgacat tccccgggtc acccacgcgt ccgaagacgc gtgggggttg tccaagttgg 60
 gaaaacgacg tcgtcgaaac aagtcgtatt gcacagtgga attggatatt gacggctatt 120
 atggataaca aaataggaaa gcgtggaggt actttgaaag acgtttcagc aacagacgctc 180
 atttcaaatt aacgcaaatt ttttaaaaac gcaaccgaaa acttgaaact g 231

<210> 4335
 <211> 466
 <212> DNA
 <213> *Cyanidium caldarium*
 <223> Clone ID: LIB190-034-Q1-E1-E11
 <400> 4335

cgggtccaaaa ttcccgggtc caccacgcg tccgtgagtt gagaccggaa gccaaacaag 60
 ttgtttcggtt ttttagagaa aagcacaaaa tggagtgttg gttagtaacc ggtgataacg 120
 atagcactgc atttgcagta gccagagcag tagggattcc gatggagaag gtgggtttctc 180
 aagcattgcc tggggataaa gttaaagttg tagaaagttt attgcagaaa tatcaaagtg 240
 caacaggaaa ggccaagtct cgagtcgtat ttgttgagaga tggagtgaac gatggtcctg 300
 cattagctgc agcggatgtt ggtgttgcca tgggcacgaa gagtcaatta acagcaactg 360
 cagctcgtgc tattttaatg actgataata tttctggact tgcgacactg tttcacttat 420
 ccaaagtcac ctttcgtcga attctgctca actacttttg ggcact 466

<210> 4336
 <211> 389
 <212> DNA
 <213> *Cyanidium caldarium*
 <223> Clone ID: LIB190-034-Q1-E1-E8
 <400> 4336

ggattcatgg catgaccacg cgtcgggcat tgggcgatga atacatcggc agaggcgctc 60
 ttccggcgta aacctaacaa ggaagaactg aagaaagtat tgcaagtaaa cgcaataact 120
 ttagcaacat attttgctat tattcgtgct acaccttttg ttatcgatgt agtaaaggct 180
 attttcgaga aagagtagaa ggcttgagtt ttgggtttgt tggcttgat tcttggaatg 240
 ttaccaact gaagaatcat tggaggctag atatgttggt agtggtttct ggtgtccttt 300
 gtgttgacag tttgtttttt ttgaaaaact aacaatatga tacaaagtgc agaaaaaaag 360
 tctccacgtg cagtgcccg caccaatcg 389

<210> 4337
 <211> 456
 <212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-F10

<400> 4337

attccccgggt ccacccacgc gtccggaatc gaatgtgtgg ggaatgttcc acaccttgag 60

actttatcag aaacctcaac attctgcttg tcacatatat ccagcttttg cttttccaac 120

aattgtatcc cagggtcttct tctcgtactt gttgagattt tcaaggtggc gagaatatcg 180

aggtggagaa ccgcaaatat gttctctttg tggaggcctt cgtgttatac cttgtgacgt 240

ctgttcaggt attggtaaag taaacaaggg tgtatttaat agaaacaaca gtttaagaaa 300

agactccttg gttggttctc cttggacagc tgttgttcca atccaaggga gacgtcactt 360

tgtttgtatt atgaaaaagg gcaaaggcaa ggatgttatt gcagtcttac agaccacttg 420

tggcaaaaaa gagtctagaa tttccgtaga agtacc 456

<210> 4338

<211> 444

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-F11

<400> 4338

ggtccgagca ttccccgggtc caccacgcg tccgaattct gctggacctg acattattgt 60

tcgagtgtct gtgcctatag atgctagttc ttcgactcgc aagaagagac agtcttcttt 120

gacccaagta tctatggata caggttccaa gaagagaaga gtctatttga tagggatagc 180

attgaaatgt tatggaaagt ctggtgtcgg cgtcgctagg attaaggagg aagttaacaa 240

gtttctagtc ccagtttcgt cacaattgga attggagagg aacgatattt gggctattca 300

gttggtcgtg agtacaagtt acaataatga agtatccaat cattttgtac ataagcagaa 360

ctgggtaatc gataccagaa aaaaggtttc ttcttcgtca tctactcctt cgcgatgat 420

gaattactcg agtccgatt aaga 444

<210> 4339

<211> 466

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-F12

<400> 4339

ggtcctaaat tcccgggtcg acccagcagc tccgagatga agcgttgctg aaaggggagt 60
tgggttttcgc aaaaatattt tatgaagctt tacaagttgt tggatgaacca cccgacttga 120
agaaaaagat tccatctcag ggaggagaaa caagaaagaa acccacaacc accacaacca 180
caaccaccac aacgaatagt ttggatactt gtcttgaagt tgcattctct tcatcgatga 240
atggcgatga tgataataat aattgtttcg tatcttcgaa tgaagagaag agaatatcat 300
ctccagagtc ggacgcttca gaacagacgt ttgtggagcc tgctgctggt agtctatggg 360
acaatcaaga aatgttttga gatgcacga ttgattcgga aggaattccg ttcttgaatg 420
acactcacgt tagcagtgat tcgatgaag tatcttccaa caatgc 466

<210> 4340

<211> 462

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-F5

<400> 4340

ccacgcgtcg gccacgcgt ccgcccacgc atccggaaga gccaaagtcg atgaaagcag 60
tttcttatga aagcacgcat agtggaag attccacttc gtttctgtcc gttgctgcat 120
caacaaccga taaccggaag acgcaaatat ccgatcattc cattccatcc tcttccaata 180
caaatatgag cgattctaag gagaaacaac agcctattca atgtaatgat gatagtttgg 240
aagaatttct tcatatggat aaaaaaccaa aacgaagtat aagagacaaa ctcaagcaag 300
tctaaaagga ataaatcatt tatatgcgta tatatatagt attaagttcg acccaggggt 360
ggaaactcat gaatataaga ggatgcaggt tccttgata aataaatcga aggctcattg 420
gatgcagtag gaatagagcc atttggtaaa aaaaaacaat ct 462

<210> 4341

<211> 410

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-F9

<400> 4341

gtaacggtcc gacattcccg ggtccacca cgcgtccgac aagagaagtc agcagtgggg 60

aaaattgggc aatgtacagg gaagtatgac ccagtaatga ggagtggagt aaacagaaaa 120

ggaagtaaaa ggaggggaatg aagggaagtt atggcaaaaa cacgtgccag cagcagcgg 180

aaaacgtgtg tagcaagcgt agagcagaag aactgggtgt aaaggtcgag tagtagagta 240

agtgtaaaag ggaaaggaaa ggagagaaa aggaaaggga tgaaatgcag agatctctag 300

agaaaggcaa gaaagacaag aaaggaagac acagtaaagtg aggcgagaaa gcataggaag 360

tgaaacggat taggaacccg ttagtcttat gcagtaaaag aaagaacaac 410

<210> 4342

<211> 133

<212> DNA

<213> *Cyanidium caldarium*

<223> Clone ID: LIB190-034-Q1-E1-G7

<400> 4342

accacgcgtc gaccgacgcg tgggtatagg gacatttttt gtttcgtttt tttttattct 60

ttcctccgct ctatcatcat cgtttcttgt tcttctaaaa tagacaatcg aatgccttta 120

cctttcggca acg 133

<210> 4343

<211> 432

<212> DNA

<213> *Cyanidium caldarium*

<223> Clone ID: LIB190-034-Q1-E1-H11

<400> 4343

tattaagcag aatttagtag tgactataaa tggtcgtgag cgattttctt tagatgttgc 60

caacgtgttg ggtttttact gcacagctgt gtcagcggaa gaaaggagtg ttatcaagtt 120

gatatacct aagttcgcgt tgaagtttgt gaaactgtca tatgagaagc atcctcccat 180

tcgttttctt cacagtatat tttcattgat tcgcccagag gactcacctt ctactcgagg 240

atataagttt caagtattac tttcgcatat tctttatgtg cgatggagtt tttgtaagca 300

actgggagaa ttgagtatat ttcgccagag tttggtaaag gagataccaa attgtactga 360

tgaatacatt gccagggttg tgccgtcgtt taatgccacg atagatgagg aacatagccc 420
tagtggaag ac 432

<210> 4344
<211> 242
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-034-Q1-E1-H3

<400> 4344

gcgtcggctc cgcgcgcctc tttgttaacg agaggcattt tggatgccat ctccggtgga 60
attttaatat acacaggatt ggtggagttg ttgacttatt ggtttacgcg caactcgaac 120
tttttaagac gcaaagccat acctatTTTT agtattgtgg gatttgtctg gttacgagcc 180
atctgcatgg cgattatcgg agcgtgggcc taagaataaa atttgtttga gaaaaagaca 240
gt 242

<210> 4345
<211> 464
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-A11

<400> 4345

cccggttcga cgtacgcgtc cggatgaggg ccaacgctgg tcaagatggc cttgtgcaag 60
tcaacaaaca tagaacagta aagagattgc aagaagataa tattttgaat agagcactat 120
cacaaccagg agatgtatTT ctgtgctttt gcaacatcca gttgttggtg aatgcagaaa 180
gagctatgat agggaatatt acttgctccag aaagtatcga attgtgtcgt ctattagctg 240
gacatataac agtttggttc gatgaacatt tggatgactt tcgtttggaa gctatcttgg 300
gagcactatt gtgtacttgt taatgtgagt ggcagcgttt tgaacgagaa ttggaggtac 360
aagaatggaa tgaattggtg aagatatctt ccttagatac ttggaagctt gtgcttggtg 420
caagacaaag agtggataat atgttacagc gactacacaa gctg 464

<210> 4346
<211> 405
<212> DNA

<213> Cyanidium caldarium
 <223> Clone ID: LIB190-035-Q1-E1-A2
 <400> 4346

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 ttcaatcgag tctggtgtca aacaactttt ttggcaccat cagattgtcc acatgtcaca 120
 ccgtggcatc agttagtatt gggacgtttt cattcaatgg tcgagtaaca tgctcccttc 180
 tctaacctgg acatgcattg gcatcaactt gtttgatcac acctgtatac agtatcaaag 240
 cgaaaagatt gctatacagt ggcatactta ggcacccggg agccttgtga aatagaggac 300
 agtccatgcc ctgattaaat tcaaagacag attcccatga aaccatttgg acaatttgta 360
 ccagtcgaag aagatagata tcaactcaat acagtagtat tgcac 405

<210> 4347
 <211> 415
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-035-Q1-E1-A5
 <400> 4347

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 gcgtccgcc acgcgtccgc ccacgcgtcc gccacgcgt ccgcccacgc gtccggcaag 120
 aaaccgatgc gcaagtagtt catctcattc agccttcaa gttgtccgaa atattgaaaa 180
 caaactgac ggggtgtcta tatattgcac tattacttgc gagtgatggt tctttggtag 240
 caggtgcgaa taatcctaca aaggaaaaca cgtcaaacac agagttgcct gagaacagtt 300
 ggtcttctat cgagacgtta atagcaggaa cgtggtcagt gttggaagat cgtgctagaa 360
 actcccatat gggtgagtct actggagatg agtaccttct cttggattgt acaaa 415

<210> 4348
 <211> 377
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-035-Q1-E1-A6
 <400> 4348

acccacgcat ccaggcaaat acgggaaagc agtaaaagaa gaaagagaaa ggaaaaaacc 60
 tgagtaccag gaaaaaaaaa ggaattaaat aaggaaagaa ggttcaagga attagaatta 120
 ggaaaaggat tatggtgaat gaaaccagga aattatttga ggagaaaatg tgtaacgcct 180
 accttttgca taatgtccca ccgagtgaat gaggaagcac aaagaaagaa aaagaagtat 240
 ccacataaga cccgaagcta gatgatctta tgctgtccaa acgaagtatg gctgaaccac 300
 tatctgtgga aaaagatttg ttagagatgg cataatgggt gaaaagccac tcatcgctac 360
 tgataactgg tactcct 377

<210> 4349
 <211> 420
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-035-Q1-E1-A7
 <400> 4349

attcccgggc cgaccacgc atccaatccg atcacctagc gatagttttg tgtgtgaaat 60
 agagtcctca caaataactg tctatcaatt gaaagagaaa attagagaga aaaatccccg 120
 gtggactcct gctcgacaac gtttgagcgt ccaacaacaa gactcgaaaa gaatcattct 180
 tgaagacaac caaacactgc aaagctatga tatcaaagac aacagtgtta tttatatgaa 240
 agacttgggg ttacaagtgt cttggaagtt ggtgtttttc atggaatatt tacgtcctct 300
 cgtcatcggt cctctgttat cttacaacc aagcttgatt tattcttccc gttccaaagc 360
 acttgggaaca gaacaaaaga ttgccgtggc cgcttgggtc cttcattatg ccaagccaaa 420

<210> 4350
 <211> 395
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-035-Q1-E1-A9
 <400> 4350

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 gtaaaagaaa gaatgagtaa gaaaaaagg agtcattcca ccaggggagt aaaggcgcaa 120
 gaaagaaacc caaagcaatt gacgggaatc ggaaaaaggg gtggatcacg taaattaatc 180

cgataaaccg agaaccttac ctctccaaga aggtgttgca cggctgtcga aagaacgtgc 240
 tgtgaagtga gagaacgtac gagaaagcca agtgaggaaa agaaggcaag tagagggcgg 300
 cccgagaaag gagagggcgt aagacgtgat acagagtacg aagaaaagag aagagagcta 360
 gaaaggaagt aaaagaagag taaaaggact agaag 395

<210> 4351
 <211> 220
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-035-Q1-E1-B10
 <400> 4351

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 cattcaacat catcaaagtc caaagggagg aaagaaagat tcttcaaaga aagaagccac 120
 aagtaaaccg gaagcagcag atgcaacaag gacaacagaa aattcgggtc cggaagcaaa 180
 gttgaaggga acgggtgcaa agaaacatta aaaagttgac 220

<210> 4352
 <211> 328
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-035-Q1-E1-B12
 <400> 4352

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 ctccaaaacc aaaataatta ccttatcaag aaaaaaaaaa ggtaaaggaa aaaaaggaaa 120
 aaacaaaaag gaacaataac caaaaagggtg aatatccaaa aggaagaaac caaaaacca 180
 aaaataaagg tacaagagta nacatataaa gatcaagata agaagagagg gtacgcttag 240
 aagcatcaca ccatatagga aagcgtaaaa gcatgaaaga aaataaatcc gaaaaagaag 300
 agaaaaaggt aagaagagg accgaatc 328

<210> 4353
 <211> 404

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-035-Q1-E1-B4
 <400> 4353
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 gattgccggt aaccatgata gatatacccg acaaattgcc aatttgctgg aagaatattt 120
 tggagattat ctgcgaggtg gaaagcaatg ggacgctgga aaatggaaag aggaggagat 180
 gaaagacgat gcatttcccc gagtttatga ccacgcgaga tggtttgggt tgaaaattgt 240
 tgtattggat caagttgggt attggagaga cagagtacga ttgaaccaat gatatgtggt 300
 tgtgtaaatt aggcgagacc taccagatgg tcatttgggg agaattccgc accacaattg 360
 caccgatttg agcgactatt ttaggaattg gatgcgtctc gttg 404

<210> 4354
 <211> 428
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-035-Q1-E1-B6
 <400> 4354
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 ctcgatttat tcttctgatt attctagaga ctattcttcg gattcgcgat cgtatgatag 180
 tgctagtcgt tctaccgagt cgtctcggtc gcctcgtagg agaaagcgca gttattcacc 240
 cagtcgttcg gactcaagaa gttattcgga tgcgtctcgt tctctctcac cgcgacatag 300
 aaggagacga gcaagtccga gctattcgag gtcaccgtcg cgttctctc gttcggatc 360
 ccgttctcct cgttcgggtg cgcgttctcc tcggtctaga agcttgagtc gttctctgt 420
 tggaaaac 428

<210> 4355
 <211> 412
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-035-Q1-E1-B7

<400> 4355

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caggatgata ttgtagaggt aagaatattg ccgagcaact ggctcgttgg acaagggtttc 120

aacaagcccg ttccgttgct tgttacgtga gtttttccaa agagggtggat accaaagaaa 180

tactgagact tgtgttcgaa tcgaacaagc gatgtttttt accgagagtg gaagaaagtg 240

accacttgac attttatcag gcagatagct tggaacaaat atattcttgg gaacctaatc 300

gttggggaat acgtgagcct ccagttacac agccggtact ttgtttacaa cgagaacctt 360

tgatattggt catagtccca ggtcttgctt ttgatagaat gggacataga ct 412

<210> 4356

<211> 290

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-C10

<400> 4356

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ttgttggttg aaatacttta acagttacta tgagctgtga tcatcgagtg gtggatggcg 120

cagttggtgc aagatggttg aaaactttca aagatatcat cgagaagccc atcaacatgc 180

ttctttaatg acgcatatt ctttgtatga ctaccgtttt ctactgaagc tgttgcgccc 240

atttcaaatg tgccttttgt aaagcagctt actggacttt accagaaaaa 290

<210> 4357

<211> 472

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-C11

<400> 4357

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tttttcgtat gaagaagact atactatttc ttgcaactgg aaacagctgt cgctcccaga 120

tggcggaagg attctgtaga aagcttcgtg gtgatgagtt cgagccctat tcggcaggag 180

tcgaacccaa aatgttagac agaagagcag ttgaagttat gaaagaagtt ggcgtggata 240

tctcacaaca aaaacccaag tccatccaag aattaccaac caaagacttt gacttagtgg 300
 taactgtttg cggtcacgcc aacgagaatt gtccactttt tccaaaCaag acaaaagtta 360
 ttcacgtcgg ctttgaagat cctcctcttc ttgcaaagaa ctgctcaaca gaagaagaag 420
 cattggaagt ttatcgacga gttcgtgatg aaattcaagg gtttatccaa ac 472

<210> 4358
 <211> 413
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-035-Q1-E1-C12
 <400> 4358

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 agttctgagg atatgaatga gcattcccggt cttcagttgc aactttttgg ntgggaagac 120
 aacgaacata tcaccgacca agttgtgata gcggttggtg tcacacctcg ccaagagttg 180
 gcagaacaag caagggttaga aacagatccc gttgctggtg gtattcgcgt caatgcagcg 240
 atgcaagtgg aaggtaatat ttatgctgca agagatgtcg caagtttctg ggatcgcgct 300
 ttgggtagac gtcgtgtgga aactgggat catgcactag tcaactgtag aattgctggt 360
 gagaacatgg cnggaggaaa tgtaacttac gactgggaat ctatgttctg gtg 413

<210> 4359
 <211> 406
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-035-Q1-E1-C5
 <400> 4359

attcgcgggc cgacccacgc atccaccac gcgtccggtg agccgctttt agtgaactct 60
 tttctatggc tcctgttacg acgcctttgt ttggcacttc ccctaaaact accaatcgag 120
 aagttgagca ctggatgaac aacctgaacg aagttcaaag tgttattcgt tcggtcgaac 180
 caaagttaaa cagcactggg ggaaagtgga aggctgttgc tcaacacgta aaggaagttt 240
 cagacgaact tagtcaaatt ttttaacaagg aagaccctca ttttgacgtc attgtcgtcg 300

gagtaaactc tggtagaaaag tttgaaaaca gtcaaactga aatcgccaag aatgatgtgg 360
 taagagagag ggcacttatg aggttgaaga agtacagcga cgagat 406

<210> 4360
 <211> 390
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-035-Q1-E1-C6
 <400> 4360

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 atgtcgttgg aggaacgcga tagaactgcg gaagaagtca atgggtgttt ggttaacttt 180
 caagtgtatt actcttttagg tcttcttga aggttttcgt tattggaacg actgattcgt 240
 cagctgggag tgactatgga cacattatct gaactttccg attccaacaa ggaaaagaaa 300
 tggagcttac atgattatgt tatttgagaa gatatatgtt ttgtaaacga acaagaagct 360
 ctttctactt ggaaataacc agttaatccg 390

<210> 4361
 <211> 457
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-035-Q1-E1-D11
 <400> 4361

cgtccgaaac ttgtacatcc tttttggttt ggaagatggg agggatatgaa aatattgaac 60
 gaggtcctct aaggctgaag actggtatta tgaagaaaaa gaagaaaaaa ggcaaagttg 120
 aagagcagga gactccgaaa gtcgctgtag gaaagacgga agcagagaag aggttcgaag 180
 aaaagaaaag acaacgtgag gaacaaaggt tgaaagagga agcacactt tcttaccgtt 240
 ccaagataga aaaatttaac gaacagctta gagaagaacc agaacacttt gacgttccaa 300
 aggtgtgccc aacaaagtaa caagagttgc gacaacattt tgcaaaatat cagaaaaggt 360
 tccttcaaaa aagaattgca aagacgtaag ttttaagaaaa ccttgggtta acaattttcc 420
 aaacaatccg aagcacgaac aataatatac tcctccc 457

<210> 4362
 <211> 383
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-035-Q1-E1-E11

 <400> 4362

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 ggctgaggac ttgacctttc agttctttgc atttttttct tggactcaga gaacactttt 120
 caaacacacc tgtaaatgtt cacaacataa attcaccgagt cttccatgca gagtatcgtc 180
 agcgaaatta cctgcgatac ggacttttcc tgttggtacc atgggattga acgactcgta 240
 cagagaacga ctaagtatat tcgatcttac cgtagaagaa gtcgctgaag actacggcct 300
 acctttggaa tacgtcatcg atgtacttat cagtaatggg gtggaagaac ctgtataccc 360
 taacgacgtt ctgtcaagcc gag 383

<210> 4363
 <211> 413
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-035-Q1-E1-E8

 <400> 4363

 aattcgccgg tcgaccacg catccgctta ttctcggtat ttttgtaact tttgcactag 60
 tcgaagctgg aaagagtccc aaaataacag atagagtata tttggatatt caagtcggtg 120
 acaaactttt gggaaggatt gtcataggct tattcggcaa tacaacaccc aaaacagtag 180
 aaaactttta acagcttgca acccatgaac acggatttgg ttacaaagga agtaaatttc 240
 accgagtgat taaaaacttt atgatccaag gaggtgactt tacaaaggga gatggcacag 300
 gctgaaagag tatctatggc gagcgattcg aagatgagaa ctttaaaata agacattccg 360
 ttccaggacg tgtctcgatg gctaatgcgg gaaggaatac aaactgctct cag 413

<210> 4364
 <211> 397
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-035-Q1-E1-G6

<400> 4364

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gtctagtcgt ccaactcagc gaaacagcaa taactgtgaa aatgcagtaa actagcagta 120
ggacggaaaag accccataat tcttgactag ataggtttag ggaggagaga gaatcatgaa 180
gtagaggagg tggggtaaga gatgaaagac cactgcatga ggataaggaa tctaactgag 240
taaggaaaat aagcttaagc tagtttggtt ggggaagtaa agcctaagaa agagtaaatt 300
aggcaagcaa aggcattgaga gaagtataat agcagaagca tgcttgaaga aaaagaaaga 360
gatttcagaa agggaagaaa agtcagctat agagaac 397

<210> 4365
<211> 448
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-035-Q1-E1-H9

<400> 4365

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cggtgatggt ttggtagaaa cgacgcgaag caagttcaac tgtacttgcg tgtgtgtatt 120
caatggaata agtaataagt gttgattggc ctgtgaactt tgttgaggta tgtaaacaac 180
ccttgatgtc cgtcaagagg ttgatgaaaa aaatcatgcg cgtcgacaga agtggtacca 240
tctgcgtggt ttggtaccgc atatgaagat gccttgctaa gctgactctt tcatcgtgct 300
agagttgtgc tataactttt taaaacttgt tttaaccgtt gttgagacta ggtttgttgg 360
ttatttgggt ttatatata tatatatata tatatatata tatatataga gagagagaga 420
gagagagaga gagagaggga gaaaactg 448

<210> 4366
<211> 422
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-A10

<400> 4366

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 agttggaatt cccctagtag gggcgatcga agcgggaaga gccactatg agaaacctct 120
 ttttctttgg agaaaagagg agatgtatgt gatacaagac aagaaatata tgcaagaaga 180
 agtagagcaa atttcctgta atggaatata atggatggtg agaagcccggt ttatctcttt 240
 tctttgtatg gaagctgcgt tacgatattt cttgtttgtg agtcggggtg tttggtagta 300
 cagccttaat tttgtgggtg ttatcaatca tccaaggcta aagacgtaga ccgagaacct 360
 tacctctcca agaattgtgt gcacggctgt cgaaagaacg tgctgtgaac tgagagaacg 420
 ta 422

<210> 4367
 <211> 266
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-036-Q1-E1-A11
 <400> 4367

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 tagtaggcgc gttccaacag gcaagggact agtatgagaa cactctttta ccttggttta 120
 agaaggaaat ctactgtgat acaaaacact gaatatccgc aacaagaata gagtaaatta 180
 ccagtaaccg tatatcaata atgtttagaa gccatttag ctcttttctg tgtatgtcat 240
 ctacgttacg atatttctta ttgtgg 266

<210> 4368
 <211> 481
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-036-Q1-E1-A12
 <400> 4368

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 tccatcgtct cttaaagaaa aaattccagt cgatgtttct aagaaaagta ctgtggcgtc 120
 ttcaacgaaa cttgcttcca atgaggattc aaaatatcca acgcttcctt ctgttcgaat 180

aggctcggta gctggtcttt taagtttctt tggagatgaa aggtgcatcg acttgatcg 240
 actgggtcaa cgattgcagt tggatgtaga tgaccttat cctcttttag aagctggagt 300
 tattctaaat atactcaaag taactgaggg agatgttatg ttgacagatt caaggagtcg 360
 attttcctgt tgcgtctatt gatgataaga agagcatggt acgagaagct ttattgcagt 420
 cgggagggcg tcggttgatt caacaaattt atcggttgct tcaacannac aaacgagtgc 480
 a 481

<210> 4369
 <211> 374
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-036-Q1-E1-A3
 <400> 4369

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 aaagttgaag gagcgagacg atgaaagacg tagagaagaa gctattgcaa agttgaagga 120
 agtcggaaat agtgttcttg gctattttgg cctcagtgtc gacaacttca agttagataa 180
 ggatcctgcc tcaggttcac ataacatacg actagaaaag tagatttatt acaaaatatac 240
 ttaactactg taaaaaactg cgctacgata tttcttggtg tggaatcggg ttgtttggta 300
 ataaagcctt aattttgtgg gtgtaataaa tcaccaagg ctaaatacgt acagagagac 360
 cgatagcgaa caag 374

<210> 4370
 <211> 282
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-036-Q1-E1-A5
 <400> 4370

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 tagctacagc aaaggcgctg gtaactcctg ggaaaggaat ccttgctggg gatgagtcta 120
 cgggcactat aggaaaacgt tttgcttcca taaaggtgga gaataacgaa gaaaatcgca 180
 ggagctatcg ggagctttta ttcactactc ctaactttgg tcagtatatt tcgggggtta 240

tcacttttga ggaaacgttg tatcacagga ctagtcaagg aa

282

<210> 4371
<211> 426
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-036-Q1-E1-B10
<400> 4371

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cttgaatgaa acggaagcat tggagtcctg cttttcgttt atgaagatat gccccacgta 180
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tgtatttcgt ttcgttgaag actttcttca ttttcttttt gacaattgga aaaccgtaag 300
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tacgat 426

<210> 4372
<211> 58
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-036-Q1-E1-B7
<400> 4372

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<210> 4373
<211> 168
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-036-Q1-E1-B8
<400> 4373

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ggtacaaaat cagattctga cagcttttgg aaaaggatga aatcgactca actttgtcgg 120

gtgcgctcgtt tcttaggggtg taatacttat ctatgatgtg cgacttca

168

<210> 4374
<211> 454
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-B9

<400> 4374

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gaaaagccgt actgaagacc gacacaggta ctcgaggaga aaggagaccc aaattaaggt 120
gagagaatgg acgataagga actaggcaaa aggatatgggt atctgcggta gaacatatga 180
aagaagcagc accgactggt tagcaaaaac acagcactct gcagaaaaga gaaaatgtaa 240
agtatagagt gtgcggcctg ccaaatagta gagaagaaat cgatgaaagt gaaagcgagt 300
aaaagatgag gtatagagaa tggcggtcct aactgtaagg atccaaaggt agcgaagtaa 360
atagacgttt gaaaggcgtc cagtatgaaa ggagaaacga gtgtagcact gtctagtcgt 420
ccaactcagc gaaacagcaa taactgtgaa aatg 454

<210> 4375
<211> 424
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-C1

<400> 4375

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ggagagatgg ggatatgctc agcaaaccga acaacagcaa cagtgccaac aagtatgtaa 180
acagtatgca tactatcaga gtccagtctg cacttccgta accacacaga gcccatactg 240
gacccaatgc tcgaagactg tgcaaacctt tgtcccaagc cagtgcagta cttataccca 300
atctcctaca tggacctatt gcagcaccta caccaccact agcgtaccat ctcaatgcag 360
caaggccgtg actacctata ctcaaacctg ctgtgcttat gcccaacaaa cttcctatgc 420
agtc 424

<210> 4376
 <211> 469
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-036-Q1-E1-C11

<400> 4376

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catttattat cagaaactaa agcatatggt aaaagataaa atgcacgcca gagccagagg 180
tcctcgtgcc gtactcacia gacaacctac ggaaggccgt tctcgagatg gtggctctcg 240
attangagaa atggaaagag attgtttgat aggatatggt gcttcgatgc tcattatgga 300
aagattgatg cacagtagtg atgcttttat tgctcatggt ttagacaaat gtggtttgat 360
tgtttccaaa gattggtgtc caacctgtgc aagtgtctta tatataaggc cattgaaaat 420
tccttatgct tgcaagttgt tgtttcaaga gttgcaaagt atgaatatt 469
  
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<210> 4377
 <211> 461
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-C12

<400> 4377

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ttgggagttt tgctaaagtc gtgtggttgg agagtgacaa gtatcaagat tgatccctac 180
atcaatgtcg acgctggtac aatgtcacct tttgaacatg gtgaagtatg gtgctcgacg 240
ttgtttgtac aagaacttca tttatctaaa ggtctttgta ctggatgacg gcggcgatgt 300
tgatttggat ctcggaact acgagaggtt tctggacatt aatcttacga gtgaaagcaa 360
tataaccacc ggaaaaattt atcaacaagt tattgaaaaa gaaagacaag gactgtatct 420
tgaaagacg gttcaagtca ttccacatgt aacggacgct a 461
  
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<210> 4378
 <211> 453
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-036-Q1-E1-D11

 <400> 4378

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cagttgcttc tttaaaggat ctgagtgggtg ttgtgcagag ttgcaatagt gttcgtgcga  180
gcaaggcaaa tgtgtcatta ctctcgtgtt ccaagtcaag aaaaccaaat ggaaagcgac  240
tgttgcacaa cgcagttgct gttcgcagtg ttgcctcgtt tggagatgct tggaacgttg  300
ttactctcac ttatgcaagt gtcattgcag ctggaggggt gactggttat gtaaggactc  360
gaagtgttcc ttctctgtta tcaggtgtcc tatccgcttt attacttttc gtttcttggt  420
atcaaaatcc gcctccactt gcctgtgcag tat                                     453
  
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<210> 4379
 <211> 461
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-036-Q1-E1-E11

 <400> 4379

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ccacgcgtcc gccaacgcgt ccgccacgc gtccgccac gcgtccgctc atttaagtaa   60
tggagagagt ttggattttt ccgtcattca aaagaacttg ttaaatgctt atgttcgaaa  120
gaaaacacat attcaacgct cagaatggta tcatgctcgg gtgcataaga ttattcattg  180
gtcaaaagaa cagatgccaa gactttttcac ctctgcagtg gatctcagtg acatttattc  240
agagtttgta gaggttgaaa acccctttgt tatcgcatth ggaatttctg ctgtacaaaa  300
agttcatcag agtattcgcc tacttacaaa agtggtatth gaacgtgtgg actgtagttt  360
agtgagtgtg gttcacccaa atccagagac agtgatagca ctgtatcgtg tatatggcaa  420
aggccgtttc ttgggtggaa gaggtcagta tctgagtaga a                                     461
  
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<210> 4380
 <211> 426

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-036-Q1-E1-E2
 <400> 4380

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 tgaactgtga tagtggagat cttttgtgaa tggaaaagat gacaaaataa ctcaatcaga 120
 ggctcaattg tgtcggttcc aagacctgat atgtctgggt gtagtttaac aggcaaagac 180
 aagtcgggtc caggcgaaaa catggtttga tgaacaaact gtgagactat gacagttggt 240
 attcgcacgt caatccacag gaacacgaga gtatctggac actcgtatca tgtccctcga 300
 ttaagacagc cgttgagatg acattaactc gactgatgat agtagtcgac agagagatga 360
 tacagaaaat cgatgtgagg tctacatgca tgactcgttt aatcgttttg tgaaacgaga 420
 aaatga 426

<210> 4381
 <211> 383
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-036-Q1-E1-E8
 <400> 4381

gacccacgca tccaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagggg ggcgcccta 120
 caggttgctc ctttctttac tcgtgctggc ggcttcatcg ctcttctcgt cgttccttat 180
 tttcatctct tcggccgctg ttttataacc tcttaattgc gattccccctg ccgtcgttta 240
 ccttattcgc cttggggaaa atcccccttt ttccaatttg cgtcttattg acgaggacc 300
 cccctttggt ccttcccaaa atttccttac cccattggc gattggcatc cccctgttt 360
 cgtcgcccta atcgccggcg gtg 383

<210> 4382
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-036-Q1-E1-F12

<400> 4382

ccacgcgtcc gacaagcgtt cagaagaatt tgttgaagag agggccaaga tgggtgactc 60

tatggaagta aagaagaata agtttataga acagtgggct gcctatagag aaaactctga 120

atatttatac aaatggacac caaagcgcgt aataggaatc ggtcttcttg tgggcgtgat 180

tccttattac ttgtatcgct acattgtgta cagtgtggag aatcagtacc caaactatgg 240

agctgcagag tatggtttac taggaggttc tcctccaaag tactcgagtc aagaagatga 300

aaataagtaa cttgacaacg tcaccaacga cctaaagttg ctccgttggc gtattatatg 360

aaaactttat agacaagttt atttttttcc ctaaaaaaaa aaaaagatca 410

<210> 4383

<211> 493

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-F9

<400> 4383

taccgatccg tacttcgcgg gtgccccac gcgtccgcaa acagaaaagg aagtaaaagg 60

agggaatgaa ggaagttat ggcaaaaaca cgtgccagca gcagcggtaa aacgtgtgta 120

gcaagcgtag agcagaagaa ctgggtgtaa aggtcgagta gtagagtaag tgtaaaaggg 180

aaaggaaagg agagaaagag gaaagggatg aaatgcagag atctctagag aaaggcaaga 240

aagaaaagaa aggaagacac agtaaatgag gcgagaaagc ataggaagtg aaacggatta 300

ggaacccgtg tagtctatgc agtaaaagaa agaattagta agaaaaaagg gagtcattcc 360

accaggggag taaaggcgca agaaagaaac ccaagcaat tgacgggaat cggaaaaaag 420

gggtggatca cgtaaattaa tccgataaac cgagaacctt acctctccaa gaaggtgttg 480

cacggctgtc gaa 493

<210> 4384

<211> 483

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-036-Q1-E1-G11

<400> 4384

taccgatccg taattcncgg gtggccccac ggcgtccgcca acgcgtccgc ccacgcgtcc 60

ggaatgacct ttgaatcgcc tttttacaag acaaagcttt catttaaaag caactcgttg 120

tttctgcaaa cttcttactt tgtggcattc aacgaacgat gaagttccag tacgttagtc 180

ttttattggc tctcttatgc gtaggttctg ctctggctgc tgaattggca cctggaattg 240

cggaaaaacc ggtagagaga ggatatgagg aaccctgctg taccgaatat tgttattggg 300

aagaaatatg tatcacaccc acaccacac ctacaccaac ctactattac tattattacg 360

caagaaatgc aaaacaggaa aatgtcgaga gaagcgtaga aaagagtatc tcttccgcag 420

aaaaatctga tgcggttcga gggatatttc ccacgtacta ctattatgag actcctaaca 480

tat 483

<210> 4385

<211> 384

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-036-Q1-E1-G4

<400> 4385

acgcgtccaa ccaaacgtcc gcttacctct ccaaaaaggt gttccacggt tgtcaaaaaa 60

acttccgtga aattaaaaaa acttacaaaa aaccaatta aggaaaaaaa ggcatttaaa 120

gggcggccca aaaaaggaaa gggcttaaaa cttaatacaa attaggaaaa aaaaaaaaaa 180

aacctaaaaa ggaggtaaaa aaaaagtaaa aggacaagaa gacgtacgga attcacgaag 240

aangagcgtg aatgaangaa gaatcccaag taatcganga agaaaaagct tcggtgaaag 300

cgtgaacgga ttttgtacac actgcccgtc aagtcttgga agtgtgctac gaataagcag 360

gagaagtaga agagagtang aaaa 384

<210> 4386

<211> 426

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-036-Q1-E1-G6

<400> 4386

ccgggtcgac ccacgcatcc aaagaaaaga gagagaagaa agaaaagaag agaaaagccg 60
 tactgaagac cgacacaggt actcgaggag aaaggagacc caaattaagg tgagagaatg 120
 gacgataagg aactaggcaa aaggatatgg tatctgcggt agaacatatg aaagaagcag 180
 caccgactgt ttagcaaaaa cacagcactc tgcagaaaag agaaaatgta aagtatagag 240
 tgtgcggcct gccaaatagt agagaagaaa tcgatgaaag tgaaagcgag taaaagatga 300
 ggtatagaga atggcggtcc taactgtaag gatccaaagg tagcgaagta aatagacgtt 360
 tgaaaggcgt ccagtatgaa aggagaaacg agtgtagcac tgtctagtcg tccaactcag 420
 cgaaac 426

<210> 4387
 <211> 469
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-036-Q1-E1-G9
 <400> 4387

gggtcgcccc acgcgtccgc gaaaatggac cactgtttgt ggttttcttg ctcggtttct 60
 ttgattttct gtactgtctt tgtaggtttg ttatatctac catggcttta cggagaccga 120
 aacgattaca aaataataaa aaggaggagt tttgctatgc tcgtccttgc ggcactatgc 180
 tatttgttta cttacgcaat tgtcataccc cactcgtttt tactaattga aaggatggag 240
 aagccccgca gtatatctct gtccactaca tttgtcttct catttttacc tgtcttgctt 300
 ttgtttctgg gaccttgca cttgaacatt attgattttg caacgtatat ggcgcacggc 360
 ttgtccgctg aagaaagctt aaagctgtcg tttcctttgt tagggcagag ttcttgata 420
 attttccgca accttatggg tgctccggta tccgaagagt tgggtgtttc 469

<210> 4388
 <211> 492
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-036-Q1-E1-H11
 <400> 4388

taccggaccg tacttcgcgg gtggccccac gcgtccgcca acgcgtccgc ccacgcgtcc 60

gcccacgcgt cccatcctgc catcaatggt ggtgatatct acaactctcc tatgatacga 120
gagaaacaaa tacttcgttt actcggaaca atgccaaactt tggcagcttt tatttatcgg 180
cacaagggtg gacgtccatt caactatcca gcttatgggtg gaagtcgata ctataccgaa 240
aactttatgt acatgttgga tagtatggat gatccttctt atcgctccaaa ttcaaccctt 300
gtgaaagctt tggatacttt gtttgttttg catgoggatac acgagttgaa ttgctctact 360
gcggcagttc gtcattctac aagtagtggt gtagatgttt ttactgcatt ttctggggct 420
gcaggtgcct tatatggacc acttcatgga ggagccaatg aagccgtttt gcgaatgttg 480
gaaaagattg gt 492

<210> 4389
<211> 149
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-036-Q1-E1-H3
<400> 4389

caagccttcg aacaagcgtc cggccaagcc tccggccaag cgtccgggct aattccaaat 60
tgccaacggg cgctccaaaa gattcaagcc taagtctgcc ttcaagccaa gttaaaactc 120
ctccaaaatg gcaacccaaa tcaatttaa 149

<210> 4390
<211> 446
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-036-Q1-E1-H7
<400> 4390

attcncgggc cgaccacgc gatccacaca cacttggttc ttccaaacat gtttcatttc 60
cttcttctta ttagtcgtca aggaaagggt cgtctagcca agtggttgga accctactcc 120
cagaaagaac gaacgaaaat ctccaagag ttggcttccc tcttaaccgc gaggtccaat 180
aaaatgtgca actttataga atggagagac ttgaaagttg ttataagag atatgcaagt 240
ctctttttcg ttgctggagt agaccctacg gataatgagc tgattacgtt ggagataatt 300

caccattatg tagagtgttt agacaaatat ttcggaaatg tgtgtgaact tgacttgata 360
 ttcaacttta gcaaagcata ttatatattg gatgagatat tattggctgg agaacttgaa 420
 gagtcgaaac gaggaaacgt attgcg 446

<210> 4391
 <211> 480
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-036-Q1-E1-H9

<400> 4391

gtacgggtccg tacttcnccg gtcgccccac gcgtccggaa aaagactgcg tgaggaggaa 60
 tggcttgtgt ggatctgctt ggatgttttc gtacttttag ttttgtgtcg tgtcggacaa 120
 gttggataca tacaagacaa acgactcttt ggaatagagt gaaaaccaag tccgtgtgtc 180
 gtacttgtcg acaagtttgt tccatgaccg aaaaactagc gcccctaaca acttgttgga 240
 cacccaacaa cgtcacatca tcggtcgaaa agtccatttc gatatccagt tataatatgt 300
 tggctcaagt ttacgtaaata acgactcagt ttccatattg tcccagaagg taccttcgac 360
 gcaagcacag attggccctt acaaagaatc tattgcaaag tttacaagtg gatattctct 420
 gtttacagga agtagattgt tacaatgaaa tagaaacttg tctgagagaa aaaagggtac 480

<210> 4392
 <211> 423
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-037-Q1-E1-A10

<400> 4392

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 tttttatgga ggagtacttt ttacgcaagt tgaaaatata aagagaggtc attttattct 120
 agataaggca gagtgtaact cttatatgga cctggaccag gatgactttt ggaaacctcg 180
 gtttacagct tgtacaacga ggagaattgc ttggctcttc gtagcatagc tcagttttta 240
 agcacttttg aggtccgctc ttgtatatgc ctttcgatat gtacttttca ctattgcttt 300

gggtanacac tggacggtta tcgattcaag aggcagttgg caagcttttg tcattgtttt 360
gaaagttgtc accttatatc aaaacgtgat agtgaaacca agactaagcg tacattcaaa 420
cac 423

<210> 4393
<211> 399
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-037-Q1-E1-A12
<400> 4393

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gaggaagcac tttgaagaga gtatgaagtt tgcaagacgt tccgtaaccg atgcggatgt 120
gcgtcgctat gagatgtacg cgcaaaacat ccaagctacg agaggattcg gtggtggatt 180
caagttttcc gatacacctt cctccaacaa tcaaggtaac accggtgacg aggatctcta 240
ttcgtgaagag aacggttcac gaatctgtgc agtttattga tgtgtggcgt tttgttgaaa 300
taaaaatttg tttagtttag ccaaaaanaaa acgagacttg aagaaacttg caaatgcaag 360
aataaccaaa ataaggataa attcagaaaa tgaagaagc 399

<210> 4394
<211> 248
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-037-Q1-E1-A9
<400> 4394

aaggtggaca cgcaagtctg gtcagtttgt tcgaaaggac caaccaagct cacaagacct 60
ttcagcttgg aggtctatgg gagaaactta ttatcctgag cgaaagagtc aagaaacatt 120
agacgctgaa gaacttcaac aaaggaagag catgaataag tcgagttcgg aacgaccaa 180
agaaaatgtt gcagctgcat catagttgag tttgtttcta tcataaactt attattcaac 240
gtgaaaaa 248

<210> 4395
<211> 432

<212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-037-Q1-E1-B10

 <400> 4395

 cgcggtccagc tcaatgatcg atggaagaaa agagtgaaga cttgttggat aaggaactcg 60
 agtccttggt gaaagaacga gatgctatct tgaatggaac aagtgaagaa tacttgagtc 120
 aattggcgcc tttagagaat gaaaggaaac gtaaaactcg tagagctatg gacttttatc 180
 aacttcaact acaatatgca gaacagctgt atgagttggc caagaaagaa gcatatgata 240
 gctttcaagc acaaaaggca gaacaaagag aatatatgtg gcgtattaag ttggaaagag 300
 aaattacctt gagactctta agattatcca ttccattaag ggacccaaac ggacaagtga 360
 ttgtaggaac ctttggaaat gaaggcttgg tgaatcttat ctatcgcaat cgtttattcg 420
 aaaattgttc ta 432

<210> 4396
 <211> 433
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-037-Q1-E1-B12

 <400> 4396

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 nagatgaacg gtgtagtata ttcagggaat atggtgtata acacgcttgg aaaaagcggc 120
 ttattagtat ctaaactatc ttttggctcc tgggtcactt ttaacgaaca agtggacgtc 180
 gaactggctt acagcttgat gaaaagagca tatgaactgg gttgcaatct atttgataac 240
 gctgaaactt atgcagctgg agcagcagag tctatcatgg gagaggcttt tcatcgaggt 300
 gtaaaggang gcgtatggac aagagaagac ttggtgttga ctacgaaaat attcttcggc 360
 ggaagaagtt cacgggatac ccacacctcc aaaggttggt caaggaagca tattgtggaa 420
 ggactgcaag cct 433

<210> 4397
 <211> 391
 <212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-037-Q1-E1-B2

<400> 4397

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attcgtcaaa aggattcggg gagagacagg ttgttggtgc aatttgtaga ctatggaaat 120

gaggaatggg ttgcatatga tgaagttcgc agtttgccaa ttgcgacaca gaatattcca 180

actgctgcgt attgtgtgct tttgaaagat gttgttgctn cagagttgac agaagactgg 240

gggatggaag ctggagaggc tttgaaagat ttggtttgga ataagcgagt tttggttcaa 300

ggcacgaagc gcattatgga cacgggaaat agtcatattc ctcatgttgt tgcagatgta 360

tatgtagaag aggacaagca atcaaggaat a 391

<210> 4398

<211> 317

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-B4

<400> 4398

gcgtccacct taactctcca agaagttggt gcacggctgt cgaaagaacg tgctgtgaag 60

tgagagaacg tacgagaaag ccaagtgagg aaaagaaggc aagtagaggg cgccccgaga 120

aaggagaggg cgtaagacgt gatacagagt aggaagaaaa gagaagagag ctagaaagga 180

ggtaaaagaa gagtaaaagg actagaagag gtacggaatt cacgaagaag gagcgtgaac 240

gaaggacgaa tccaagtaa tcgatgaaga aaaagcttcg gtgaaagcgt gaacggattt 300

tgtacacact gcccgtc 317

<210> 4399

<211> 379

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-037-Q1-E1-B6

<400> 4399

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 tgââââagtg tcaacttccg gttctccctg aatacattga atctcaaatt ctggaattat 120
 tagagtatgt aaaggatggt gctgttgcta gaatggtttg taagcgatgg aagagactcg 180
 tggatgââââ ttcccaattg tggagacgac ttcaaggctt tacactacca aaacgactac 240
 caagtgaagc ggââââagtat agââââaggcag ctgaatgtgg gaatcgagag gcantgggtgc 300
 ttcttgcctt gctctattat tatggatatc agagtcagga tgccacagtt ttgtcnttga 360
 cgtttcttcg aaatagtgt 379

<210> 4400
 <211> 390
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-037-Q1-E1-B8
 <400> 4400

aattccccggg tcgaccacg acgtccacgg acgcgtggga atttgattag gcaacaagta 60
 gagttgatga agactgaagg agttaatttg gtatttactc ctgaggctat tcgagaaatt 120
 gctgctgttg ctgccgaagt caataccaat gtggagaata ttggagctag gcgtttgtat 180
 accgtcattg aaaggattgt agaagatatt agtttcaatg ctccggattg gaaggggtcag 240
 accgtgacta tcgatgcacc tagtgtgâââ ggttctcttg gagatatgtt gttgaagaca 300
 gacttgtcca agtttgtatt gtgacaggââ agagaggââc gatagattgc tttataâââat 360
 gtttatcgtg ttgttggttac ttttggââââ 390

<210> 4401
 <211> 379
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-037-Q1-E1-C1
 <400> 4401

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 tgatggtgââ agtgaatgat aagtttâââat tttatgagac agtcgacctc aatcgatttg 120
 tcgacagââc tgcagctcag gaacââââata tcgacgtaga âââcgcgcac tatgttttatg 180

ttttacattc tgttctagtt catgtgggag atgttcatgg eggacattat tatgcattta 240
 ttcgtccgaa acctttgtcg gatccctccg tttggttcaa gtttgatgat gaaacagtct 300
 taagggcaga taagacacaa gccgtcgatg ataactttgg tgttggtggt gatgaagatg 360
 agtcaccaga aaggaaaat 379

<210> 4402
 <211> 424
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-037-Q1-E1-C10
 <400> 4402

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 aagataggaa cactgctatt tgcttacaaa atgaaaacgg accttgtcct ttactagcaa 120
 tagtcaactg tttgttggtg agagcgagca tcgatatcca cgccgatatt tcttacatat 180
 cttatcaaca gttggcagag cttttaacgg attatttatt tcagacacaa agtagtgcg 240
 cacaggaccc caacttgga caaatagttt tggacgtcgt tgggtgttacc ccgaggttga 300
 gaacaggtat cgacgtgaat ataaggtttc gtagttgtga ctcttttgaa tatactgttg 360
 agttggctgc atttgatgct tttcgagtgc gtttggtaca tggttggata attgacccaa 420
 acga 424

<210> 4403
 <211> 321
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-037-Q1-E1-C11
 <400> 4403

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 tccgctgtct tgaaagacat aactgcaagt attgaaaagc ctgacataaa atggataact 120
 aggacgaatc tcagtacttg tctgaattct gcagaaggaa atgttacggg tgacttgctg 180
 cggcagtgtg gcttgaagga tatattttca ttgaagcttc tcgacaataa ctttaagttg 240
 gcgtgtttta atgatgcctt gtttttagtt ttaacaggct taccctttgt tattactggt 300

aatcgatat tctgtagacg c

321

<210> 4404
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-037-Q1-E1-C12

<400> 4404

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ggtgtaatca tcatcgaaaa gtgaaacgag ttggcaatga gtgagttggt gcgacctggt 120
cgtttctttg atagcggctt tggtagactta ttttcttgga cgaatgaccc cttcttccgt 180
gatgcatgga acttgatacc tcgagtaggt ggagctgagt ctcagttatg gtcgccgaga 240
atcgacctca ttgaaaaaga agacgcgttt ctggtgaaag ctgaggtacc tggagtaccg 300
agagaaaaca ttaaagttga cttgaaaggg gatattctga gtgtgtctgg agaaaaagct 360
gacgaaaaaa agtcggatga agaacgagaa ggaacggtat tccatangat ggagagaagc 420
tacggaaaat 430

<210> 4405
<211> 301
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-037-Q1-E1-C2

<400> 4405

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ttctctgttg tcttctttac gcgatgggtg acaacaacaa aatagtttca accaattttt 120
agcatectcc ccctctgaga gtgtggctcc ttcttttgga cttctctgctc ttatagctcc 180
gtccatctcg gaagatggca ttacacttta tttganatat gctttgggtg gagcaatctg 240
ttgttgcggt actcactcct caactgttcc tattgacgtg ttgaagacac gtttacagac 300
a 301

<210> 4406

<211> 383
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-037-Q1-E1-D1

 <400> 4406

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 gcttgagaa tctgtctaag aaaaagttaa attcgtcagg aagctacctt gtgattggag 120
 gttgtttggc aaccgccgct gtattgtttg gtggtttgat aagttttcgc cgtgggaact 180
 ctcgcaactc tcaaagtgtt atgcgtgctc gtgttctgac acaagggtgca accttggttg 240
 cggtagcagg tactttctgg agtgcagcaa atatgaaaag gaaggagagg gagcaggcag 300
 aagcagccgg cgaagagttg ggagtagaaa ccttggtatca agacaaggcg aaggctctcc 360
 tagaanagac cggtcgacag aaa 383

<210> 4407
 <211> 403
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-037-Q1-E1-D11

 <400> 4407

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 agaatgccat cgattttgtt acctcgagg gtagaatgaa atatgttcgt cctatttaca 120
 aggatcttta ctatatctat cctcgagggg atttggcgct gaagacattt tcagaaaacc 180
 gccatcgta tcatagtatt gcagcaaagt tgattgcgag ggacttgagg ttgatagaaa 240
 attgattgct ttttatgtac aacaacaagc aggtctctt gttatgtctt ggtttgtttg 300
 tgttgtagtg tctgaatatg caagtggatg cccgtaaaca actattgaca tatatatata 360
 catatatata tgtatatata gaaagataga tatcgatata cat 403

<210> 4408
 <211> 401
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-037-Q1-E1-D3

<400> 4408

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acaaaagaaa tactggataa aacaaagata caataatata gtagtatttc aagtaatatg 120

tgcagctaatt tcgaaacagt ctttgtaccg aattcgctcc ttgcaacgac aagtaagtaa 180

gaaagtgtct gtgtattctt ctcttgtctc ctccaaccaa cacaataaca acaacaacaa 240

tcttcgattc tctctctagg aaatagttga gtttacaat atttgcaacc aatgttttca 300

tacacatcct ccatggaagt tgttactgcg acccatattc tttttggaaa catttcttgg 360

tctaattgtt ttgatgaata gaaaagaatc gcaagatgac t 401

<210> 4409

<211> 330

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-D4

<400> 4409

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gtcgaccacc ctcaattgga tattcgcaag tctgctgtaa agtgtttagc agaaatacaa 120

atgcatattg gagaatggaa tcttacgaat cttttattga gcaatacgca gcgaaaatgg 180

atagaaatgt atatccaaat atctcaacag caacattcga cataatgcaa caagtccgtc 240

gtacggttgt ggtaagagat gccgttggtg gagaacactt gttgtattcc attagtaaag 300

aaagatggtt attattagaa tgaaacgaag 330

<210> 4410

<211> 462

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-D7

<400> 4410

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cgcccacgcg tccgcgttca gcactacgta gactccaaag gtgtttctta ttacgggttt 120

gaagcctggt ggaagtgggt agctgatggt tgtccacctc gtccttccaa agaggaagtc 180

gctaaaagga cacgccagtc tggtcagttt gttcgaaagg accaaccaag ctcacaagac 240
 ctttcagctt ggaggtctat gggagaaact tattatcctg agcgaaagag tcaagaaaca 300
 ttagacgctg aagaacttca acaaaggaag agcatgaata agtcgagttc ggaacgacca 360
 aaagaaaatg ttgcagctgc atcatagttg agtttgtttc tatcataaac ttattattca 420
 acgtggcgta ctttgttacg ttgttccact ttgtgtgggtt tt 462

<210> 4411
 <211> 375
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-D9

<400> 4411

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 tttttggctt tcatggaaag gaagattatt ataggaagaa tggaagtga ttcttcttac 180
 cttttgtcag agttcctttg cttattcttc agtcgaagaa tgatcctatc gttgatacag 240
 aacatgtacc acaaatacct aaatctctac ctattcattt attttatact gagaatgggtg 300
 gacactgcgg ctatttccaa ggattctttt ctccatctta tatggcgcaa gaaatgtccc 360
 gttttttggg ttgga 375

<210> 4412
 <211> 280
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-E10

<400> 4412

gcgtccaccc acacgtccgc ccacgcgtcc gagaattcga accagtactc atgaggggac 60
 atataat ttt gatagtaata ataattccta agtatttttc tttcgtattg gtttgtcata 120
 taaacaataa gaacaacgaa aaataaaaaa aataaagaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaagaaaa gaaaaacggg cagccgctct aaaagatgca tgcttacgtg agcatgcaag 240
 aaaagtcatc tgccttatat actgtcaact aaattaaatt 280

<210> 4413
 <211> 214
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-037-Q1-E1-E12

<400> 4413

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 cttgactaga taggtttang gangagagag aatcatgaag tanaggaggt ggggtaagag 120
 atgaaagaca ctgcatgagg ataaggaatc taactgagta aggaaaataa gcttaagcta 180
 atttggctgg ggaagtaaag cctaagaaag agta 214

<210> 4414
 <211> 450
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-037-Q1-E1-E6

<400> 4414

 ttcccggggc gaccacgcg tccatattga ttgaaccaac ttctggcaat accggaatag 60
 cgttggcggt tattgctgcc tctcgtgggt attctctcat cttgactatg cccgagtcca 120
 tgtcgatcga acgtcggatg atacttttag cgtttggagc ccaagttgta ctaactcctg 180
 cttccaaagg tatgaaagga gcagttttga aagcagaaga actcttgaaa accacaccta 240
 atgcatacat gttgcaacaa ttttccaatc cagccaatcc caagattcac tatgaaacca 300
 cgggaccgga gattgttgca gctggaggtt gcgatgtatt tgtttcagga gttggcacag 360
 gaggtactat tactgggtaca gggagatatt taaaggagaa gaatccatcg gtccatattg 420
 tggcagtaga accgaccgaa tcccctgttt 450

<210> 4415
 <211> 421
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-037-Q1-E1-F1

<400> 4415

cggtcaagaa ttaccgggtc gacgcacgcg tccacccacg acgtccgctt gttttggctt 60

tggtagtgat ctattatgct ttgcttggcc ttccattggc gtgtttctgt cttattatgt 120

gctgtttacc attatttata aggttacttc ttccttatgc ggagagcaca caacgtagac 180

gtggcagagc ggcaacttta gaacaaatca acagtcttcc atgttccagt tatgttcatg 240

gctcctttga gagagaagaa gatacgagtt gtgtgatttg tcttacggac tatattgacg 300

gcgacatgat tcgtcactta ccttgcaagc atcattatca taagaaatgt atcgatgaat 360

ggctagcatt ggacaagtct tgctcctctt gtaaaaagga tattgattgt cgtgaagata 420

t 421

<210> 4416

<211> 439

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-F12

<400> 4416

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gcaagactat aactcttgaa gtggagcctt cagatactat tgagaacgtc aagtccaaga 120

tacaagacaa ggaaggaatt cctccagacc agcaacgttt gatatttgct ggaaagcaac 180

tagaagatgg tcgtactctt tcagactata atattcaaaa ggagtctacc cttcacttgg 240

tattgcgttt gaggggtgga atgcagatat ttgtgaagac acttacaggc aagactataa 300

ctcttgaagt ggagccttca gatactattg agaacgtcaa gtccaagata caagacaagg 360

aaggaattcc tccagaccag caacgtttga tatttgctgg aaagcaacta gaagatggtc 420

gtactctttc agactataa 439

<210> 4417

<211> 449

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-F3

<400> 4417

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gttcgtaatt atggaatggc atggggagct tttcttctct tgggttctgc agcatcttca 120
acgacttctt tttccaagca agtttcagcc ctaactttgc agggaaacttt ctatttttat 180
gtcggagtat cattgctggt tctaataatc catttgatat ttttacctga aactaaagga 240
atgttacttg aagatgtgag agagctcttt aacgatggca tggtgggatt ggcacggaga 300
aacttgagca atattcaaaa ttccattttg cataagtttc ctactctttg gaagagaaat 360
gaatcatgaa tttattttta aaatatatgc ttgccctttg ttctagtgc tttgttgacc 420
tttgcttgat aataaaacag agtgaatgc 449

<210> 4418
<211> 170
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-037-Q1-E1-F6
<400> 4418

actgttctag aggtcaacgt aatcctatgt ttcttccaaa agagacatca actcctagcc 60
gaggatgatg aaggatgtcc ccaagttcgg agaaggaagt agaaagaaga gagtgtgaagg 120
cggcgtcata atagaaatcc gaaaggagta gaagaaaaga gagagaaaaa 170

<210> 4419
<211> 374
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-037-Q1-E1-F8
<400> 4419

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ttgtggtgaa gactttgttt agcaacttgt gtgcaaaaaa tggtaactt gttgtatact 120
gatgagggac gaaacctgtt aaagggtac caactcattt tatatgttgc tatgttggt 180
ttctccgcca ctattttggg gcttatgggg aatcccatgt ttaatctcta tctaattgcc 240
aatgaatata gacaccgga tcctagcgaa cttttgtac ccattgacaa agtgaagaac 300
gtcactttct acaagtctct ctcttctgt gcctggggtg tcacaggaga tcgtacgcgt 360

ggcatgcatt ccac

374

<210> 4420
<211> 297
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-F9

<400> 4420

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ttttgttcca gaatagagta atttccatgt ttactgggat agagcgtatc tttgctccat 120
atgcagaact agaatatgtc ctggttcgta ctgaatgggc aataacagta gtgttttcgcg 180
caatatcatt attggtgcac aagtcagctt aatcattgcc atacaatgac gtgcttgaag 240
aagattctac gtggtcactt tggtcctatg agtaaatttg agtagtaaata ttttcct 297

<210> 4421
<211> 433
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-037-Q1-E1-G11

<400> 4421

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caaaaattat tgcacaattt acaaaaagca tttggttaacc aacattaaag tataaaagtc 120
ctttgcacct gagtanagca gagatatgga gagcttctta tccaattgga agcagacgtt 180
cctttgcaga acaaaaggca cagcagcagt ccaaagaagg tgaagaacca ataacgcctt 240
atcaacctgt gacggagaag ctggataaaa gagacccaaa ctatccttgg aagtggagaa 300
gttntcttcc tgaacatacc tacaaacca aactcaatat caatctggaa aggcatcata 360
cacctttaga ttttagagat aaggtagccc cggaatcct caagttttta agaatttttg 420
cggatgcctt ttt 433

<210> 4422
<211> 364
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-G2

<400> 4422

gcgtccaatg agattcacct gtatgaatat tacaattcca ccttacaaca gtccacagat 60
catcaagatt tgggcagtat tcataagcat tttgggcttt ttgttgcttt tatecttttc 120
ttccatgttt tactggatgc gaaaaaatgc tcctcgaacg gacttataga tgcttatcga 180
tggagctttc cgcggtgtaa tgactttgaa taataaagtt gggttgcttc catttaaaaa 240
aaaaaaaaag aaacaataaa aattaactaa tacatccttg tcagtaatca tgaatacaac 300
aaataaaatt gcgagaaata caaagaagtc ttaaaagaaa ataaaaaaaa aaaggggggc 360
cccc 364

<210> 4423

<211> 435

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-037-Q1-E1-G3

<400> 4423

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gttttcaagt caagcgtttg gcgacgcgag tcaaaaaccc gacatgtctg ttttctcttg 120
tgctccattg cttggtgcaa gacttgaaga gcagccatat cccaacaaag ctcttgaagg 180
acctttcaag agcctccagc ccgacttcta tcccgagtct gagaaaaagc gcgtcttttg 240
ttataatgag caatactcct catctttacc tgagaacctg catagttgga gtttgagggc 300
acgttgtagc agcgatgata gttgcgatag agagattgag agaggtttta agtggaacga 360
gaaatctact tgccttgga ctttgcaaga gcgcgtaaag gctctannaa gaagaaacta 420
caggttgaat atgca 435

<210> 4424

<211> 141

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-G5

<400> 4424
 gtaaagggtcc agaattcccc ggccgaccca cgcgtccaga aactcccaaa gataagttgg 60
 atacgagtca agtgactcca gaagggaaat atcacaacca cgacagtcct tgagaaataa 120
 atcgacactc gtgtgagatt t 141

<210> 4425
 <211> 428
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-037-Q1-E1-G8

<400> 4425
 ccggggccgac ccacgcgtca gtaggattag aacaagtgga tacgctatcg aatagtttac 60
 gtaattcggc ggttatttcc aaggatgaat ttcattggagt acctgccacg ttttccaagg 120
 aagatatgag tacttttaggt ggaaatagtt gtttactcat ggagacgaat aacaacagtg 180
 caaagtggct gacgagtagc aagatgttgt catcggaatc ggattgccta acaactagta 240
 cgacgacaac tcgtggagaa agtcctgtga agaagacatc gaataattat acgacttgga 300
 cgagttatga aattcctgga gtttcgtttg gagatgactt ggggtcccgac tgggtattat 360
 ctctttctaa ttcttccttg acagccaatc ctccggatgc tgcaggaaac aactctttat 420
 ataatcac 428

<210> 4426
 <211> 288
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-037-Q1-E1-H1

<400> 4426
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 aaacattatg gaaatggcgt atcaacgaat atttggaaac tattacatat tcgaagctga 120
 gaaagaagaa ttgaagacca ttgactctgc tttccagaat ggaagatacc gcgtcaagga 180
 ctatgttcga gctctgagca agtccgatgt gttcaagaac aagtttttct ataatcgccc 240
 aatccaaaac tccaaccaag ttgtgtttcc gtaagaaaat gggaaagg 288

<210> 4427
 <211> 364
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-037-Q1-E1-H11

 <400> 4427

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acgcgtccag cattattatt tacgtggcag tgattgcact aactactttg actaccgttg   60
gttcggggat ggcttatata tatcacgtat tttggaacaa acaaggaaat gtatttcaac  120
atgtcacaaat gataagacga caacgcaatc gaccgaaatg tttctaaatc ctcaacacaa  180
gtgtttccaa acaggaaatt cgccttctga taagcttacc tgatgaacgc gtatgcctaa  240
tcatcataaa accttgatac tggtagcga cctatataat aaaatatatc atcataatcg  300
agtaaaagta ctgttgcgag agacgtgtcc ggacaaaaaa tatagaaaaa cgaatttttg  360
gaaa                                                                    364
  
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<210> 4428
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-037-Q1-E1-H3

 <400> 4428

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cggtaagaa ttaccgggtc gacgcacgcg tccactcacc aaaaaagatg tggaacattg   60
tttcgatgtg atatggttta gcatatttga tatccaatat tcttgtttat gttctttgaa  120
tgcttgaac cagatgtgtc gaacctacag cgtgtctgtg ccggctggcg atgactttga  180
atttccaaac tctccttgct taagtgactg ggatctcggt cattttgttt cccatagcaa  240
cgaacctgta tttcgtgtat ttcacaagtg catcatgtgc tgcttttttag aacaaagaat  300
agttgtcttt cgggatggcc tttgtatact gaaaaattcc aacagctggt tgttgttgga  360
tgctttgcgt gatatcacan aacatgaaaa ggacanagaa aaccggt                    407
  
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<210> 4429
 <211> 423
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-H4

<400> 4429

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agattgaaat ctcttagcat gaagggttcta agaccaacga aggacagtgt cctatggaag 120
aagctagcaa taataatact gatttagagc aaactatttt ttcaacggga aaggacacag 180
ttggggcaaa cagcgatcat attcgggtac atgaagactc caactatttt tattggaaag 240
gttactggta cggatatttt ctatcccagt ggtatctttg gattggagaa agtcctcctc 300
ctgtcgaaca cgcaatgcag cagtacaaag aatattcaca agtccaactc caggataagt 360
agattagaaa atgggtctttt gttttctcaa tgcagccagc actcttggtg ggtccgtttg 420
ttc 423

<210> 4430

<211> 433

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-037-Q1-E1-H5

<400> 4430

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cttgtcctac ttgtagagct cccgtagatc tctcaagtga taatccaagt ggaacaagtg 120
ttggtgcaaa tggtgttga gagcaaggac aagtgcaaaa cccagtagaa aggagacaga 180
tggaatatgg aattgccaat cctccaagag gacgtacatt aagagttggt ttgcgtgtca 240
atattgaaa caggactgca gagtgggaatc ctttccaaga ggacctgttt cagacattgc 300
acgaagcaag tcattctact ttgatgcatt tcagtccttg tcctcgtcct cctcctttcg 360
agnatttagt atgaaatgaa caacagtcgg gttggaacag cgtccttagt aataacagta 420
ataataatac gat 433

<210> 4431

<211> 422

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-037-Q1-E1-H9

<400> 4431

tgacggtcta gaattaccgg gtcgacgcac gcgccaggg gcagaacagt ttggtgcagt 60
attgccagcg ccagtagaag aaacaaaagt gtccaaactc tttggactct gctttgcttt 120
ctatctagaa tggcagtggg aatgaaatcg ggagtggcaa gttacccttt ttctgtcggg 180
agagagtgac aagggttcgc caccagaca gcatgttttg gcacttggcg ccacaaaacg 240
aaactgacta gggcaaaaca ctgaatgtga tttgataaag agtaagcgtg cgtgacactg 300
gcagagtggc aaccgcaggg tcgtctgtta catagccagc tgtcgtgtcc ttatctcttg 360
cgagattagc tccggtagga cgacgtaca aagccaactt gcaatcctcg agacgctttg 420
tc 422

<210> 4432

<211> 352

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-A11

<400> 4432

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aggtacaaac aatggcggtc ctaacggtaa ggatccaaag gtagcgaagt aaatagacgt 120
ttgaaaggcg tccagtatga aaggagaaac gagtgtagca ctgtctagtc gtccaactca 180
gcgaaacagc aataactgtg aaaatgcagt aaactagcag taggacggaa agaccccata 240
attcttgact agataggttt agggaggaga gagaatcatg aagtagagga agtggggtaa 300
gagatgaaag accactgcat gaggataagg aatctaactg agtaaggaaa at 352

<210> 4433

<211> 422

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-A12

<400> 4433

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cacacacgag tttctcgtgg tatgggtgaa aagtatttag agcaagtgtg gatattcata 120
cgacaataaa tcaaccttgt gtccggtgag aaactgtgct acgggatgaa caatagtgtg 180
gttgcgggac agagtcacga gtcgagtggg tacttgaacc aagtattaca agcactcgat 240
gaagcaaaga agcaagcaat agaacaatta caacaacgag cagaagaaat tagagaatgg 300
tctacggtga caaccaagaa tacggtggat gcgttgttgg aagagtccaa gtatatagcg 360
tctttgcaaa ggcagaggag caagaagaat aactactacg aaaagattac gctggggttg 420
at 422

<210> 4434
<211> 342
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-038-Q1-E1-A2
<400> 4434

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gtatccatcg ttgtgctctt agcttcgcga ctcgtcgatt cttttgtgtg tgattgggtt 120
atccgaatcg cctttgtaaa cgcttggtga tcagagagaa gtaggaatgt tggaccgga 180
gactcatgaa agatctgttt aattatcatg attagctgag catgcagagc gttatgatga 240
catgatacaa caaattacaa agaatgcac agacgccaac gataaagtag cggaacttac 300
tgtaaagtaa cggaatcatc attcactggc atatatgaat gt 342

<210> 4435
<211> 322
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-038-Q1-E1-A4
<400> 4435

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ggagtagatg aggaaagaaa gatcaaggaa gtaagagtaa gagaaggagt aatgtgaatg 120
aaagcaggaa agtatttgaa gaagagagtg taaagcgcgt accttttgca taatgtccca 180
gcgagtgaaa gaggaagcaa aaagaaagaa aaagaagtag ccaggtgaaga cccgaagcta 240

gttgatctta tgcgtgccaa gcgaagtaag gctgaaccag tatctgtgga aaaagatttg 300
gaagagatgg cataaggggt ga 322

<210> 4436
<211> 450
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-A5

<400> 4436

gggccgaccc acgcgtccac gtgtgggtgt gctcagtcag aactgcttct cagttagtta 60
cgcaatatgc ctagtcataa ggaacaaaat aaaggaatta aaatatcagc tgacggttac 120
gcactaaagt tgagcgggtat tcggttggtac gtagacggca gtttggtcac tatggtggac 180
gcagacgacc tcagagccct catgtttaag gaaagcctca aggaaaagtc aaagctgcat 240
gacccaaaat ttttcaaaag ctattatgag gagaataagg actactttta ttatatgact 300
catacggaga agaaaatgtt tctttctctg gaagttgcac gagaatacgc tactctggtg 360
ggaaactcgt ttctgcagaa atatttggac aaagtcattg agcacgaaca cgcatactaa 420
gggaaacaac gttgttgctg atagtttgcg 450

<210> 4437
<211> 239
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-A7

<400> 4437

gtccgggtcg acccacacgt ccaggaaagg tcatggaaag aagttggtaa acaaatgagg 60
acacgtataa cagaacacaa gaaaggaaaa cgtattctaa atcaaaaatt gaaagctttg 120
ttcggtgagt cgttgatatt tccaaccttt ttccaaggat tgctgcaggat gaaaaatgat 180
attttaaggc gttctctttc cgaggagcca taatatacct tctaaagggt ttatagttg 239

<210> 4438
<211> 322
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-B1

<400> 4438

gcgtccgaat ggaaggacac ccaaatgttc gaagtgggta tagtaaaaac cagtgccgac 60
atcaacgctg gaatctgtgt agcaggcatc caccatggga cctggatgta gtcgatccag 120
tataaatctg catgtgggga aggattgggc actgatacaa ggaagtatgg gacaatattc 180
aggaatggcg taaacaaggc aagaaataaa aggaaggaat acacggtagt tgtggcaaga 240
acacatacga actgcaacgg ttttaagatct cgtgtaatcg atgcactaaa aaactgagtg 300
attaagtcga ataggagtca tt 322

<210> 4439

<211> 427

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-038-Q1-E1-B3

<400> 4439

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aaaaccagaa acgagtagtt tctacatccg ttgtgttgtc tcttgtgtcc actggaaatg 120
gagatgattg caaatccttt ggaatacaac gacaaaggag atatctaaac tgtanggggg 180
ttttctacag aaacagaggg taactcgagt gtcttcattg atagaaaaga ttcccagaat 240
gtcgacggcg tttagagaca gaatgagaaa gctatccgca acaaccttgt atacaggaag 300
ctccctatga tatccgtgag gaggccatgg cagacttgaa aatactcgtc gaatattcaa 360
aatgaaaaaa gaatcganaa actctacgga aagcattggt attcgttcaa gacatgaaga 420
acaaaag 427

<210> 4440

<211> 462

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-B7

<400> 4440

gtataggtct agaattcccg ggctgaccca cgacgtccac ccacgcgtcc gaaccaatga 60

acgaagtgtg gataatagaa ctagatgggt caagtcaaaa tctaaaaacg ctcgttctac 120
 ttggaacggg aaggtacaac ttccaaaacc atggaaagcg gaaccacctt ttgggccggt 180
 gacagaaaca gagttgaaaa gaatgagaga agaattctgg gatacgagag tggaaggaag 240
 gcaagaaatg tggcaagcgt tgaaagcagc agcagaaacc aacgacgaaa cgttgcgaaa 300
 tgaaattgta aaggcagctg gattgactcc tgccaatgaa cgaagaacgt tggaatcttg 360
 ttacgatgaa ctaggcaact actatgaggt accggtgtat tgtttgaggg accccgataa 420
 cttggttcga ttggaagaag aggaagacaa caagaacaag tc 462

<210> 4441
 <211> 458
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-038-Q1-E1-B8
 <400> 4441

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 ttttcgtggt tcgatgggtg gattgtgcaa ttttttttga caatgaaaaa aatattgtac 120
 atctactgaa atgtaagaac atgaggaaga aagaggcaaa tacgggaaag cagtaaaaga 180
 agaaagagaa aggaaaaaaac tgagtatcag gaagaaaaga gggagtagat gaggaagaa 240
 agatcaagga agtaagagta agagaaggag taatgtgaat gaaagcagga aagtatttga 300
 agaagagagt gtaaagcgcg taccttttgc ataatgtcnc agcgagtgaag agaggaagca 360
 aaaaganaga aaaagaagta gccaggtaaa gaccgaagct agttgatctt atgctgtcca 420
 agcgaagtaa ggctgnaaca gtatctgtgg aaaaagat 458

<210> 4442
 <211> 359
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-038-Q1-E1-C1
 <400> 4442

ggtccagaat taccgggtcg acgcacgcgt ccgattatac gtcacgcgat ccactctggct 60

atgttgccag ttgaagttaa gcctaaggat ggttctttac gttctcaaag gcattctttaa 120
 tttataataa catatacatg cgtggacaat tcttctgcga tttcacacac ggaatcttct 180
 catctatcat gataaggtga cggteaactc actcctccga taccaccaca cgatgcaaga 240
 taatactttg gttctaacaa gttaatgtcc agttagataa catatcaagc atgtccattg 300
 acacctcgat ctcaattcaa agatcctaag ttacagttgg gtcctatagg ttcttctgt 359

<210> 4443
 <211> 445
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-038-Q1-E1-C2

<400> 4443
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 agtcaccttg tcgttgtggc ttgaaatatt ccacttgtaa gaaaccttat cgtatagata 120
 ttttacgaat atccaaacct agttgtttga ataaactaga ctttcgagct tctcagcaaa 180
 aaaaggactc aaagaactcc aagttattgg ctttcgaaac gaatggagat gttctcaagt 240
 ttggagtctt gggtactagt agttgccttt tttgttattg gttcctatta caagtatttc 300
 gagtatctga acaaacagct ggactgggtga ctactggatt gttactatc tttggaatgg 360
 gactttggac ttttccgtat tttctcgcgt tgctaataa gagatgacat atgtgcaaca 420
 gttgagagag tatgaagaca aagtt 445

<210> 4444
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-038-Q1-E1-C4

<400> 4444
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 tgcaattttt atcgaaagta ctgaagtga caaggcagag cctggagata atgttcgact 120
 tcgaatcaag ggaatggaag aagaagatat tcggatggga tttgtattgt gtgacaccga 180
 tgctttgggt caaggcacta cgttatttga tgcacaaatt atgcttttgg actataaaaa 240

tattatttgt gctggataca gttgtgtcat gcatgtacat gcagcagtcg aggaatgcac 300
gattgaaaag ttgctggcac aagttgatcg gaaaacgaac caagtgatac aaaagccgac 360
aaaattctta aaaccaggaa tggcagcgat cgctcgcata tctgtagcgc agccaatttg 420
tatcttacct t 431

<210> 4445
<211> 452
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-038-Q1-E1-C5
<400> 4445

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agaatgaaaa ctcttgttgt atgcttttgc aagtgaagag actaagcaag gacgctgttg 120
tacctcaaag aggttcgaaa cttgctgcag gttatgacat ttgttcctcg gaagactgta 180
ttgtaccagc tcgaagtcgg tactgtgtta aaactgactt ggcagtgagg attccctcgg 240
gacactatgg aagaatagca cccagatcag gacttgcctt aaagcatgga atcgacgtag 300
gagctgggtg tatagatgag gactatcgag gaagcctcgg tattatttta tttaatcatt 360
cccgaagaag gatttcatat atccaaagga aatcgaatag ctcaacttat cctagagaga 420
atctctactc ccgaagttgt tgaagtggat aa 452

<210> 4446
<211> 464
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-038-Q1-E1-C6
<400> 4446

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tttttattgt gttgcaaacc acatcatgtc acaacaaccg tcttctgcac ttcgagtcgt 120
tgtattcagt accaaagact atgatcaaag tggattgaca gaagcacttg aacgtgttcc 180
taatgctgct cctataaagt ttcggttctt atcgtccagg ttgtctgcaa atacagctga 240

gcttgccaaa gatgcagacg ctgtttgtgt ttttgtcaat gatactgtga acaaggaagt 300
 attgaagata cttcacgaca gaggagttgg tttgatagct ttgcgtttgtg caggcttcaa 360
 taatgtcgat ttaaaggcag cttccgagtt gaaaattcct gtggttcgna gtactgccta 420
 ttctcctaata gcagttggag agtttgttgc tgcacagtta ctta 464

<210> 4447
 <211> 434
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-038-Q1-E1-C7
 <400> 4447

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 aaatggctgg attgggctac tgccgaagcc ttagcttttg cttctttgct ggatgaaggt 120
 tatcgcggtc gtttaagtgg tcaagatagt gagcgcggta ctttttctca acgtcatgcc 180
 gtctgggtcg atcaagaaaa ggagactcgt tattatcctt tccaagttat tcatggcaaa 240
 gatccaagtg tctacaattc gcacttgtca gaaaatgcgg tgtagggtt cgaatggggt 300
 tattccttgg aaacacctca gactttgtg atatgggaag ctcaatttgg agactttgca 360
 aatgctgcac aagttatgat cgattgtttt ctatcttgta gcgaaaggaa atggagaaaa 420
 caaagtgggt tggt 434

<210> 4448
 <211> 258
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-038-Q1-E1-D1
 <400> 4448

ggtctagaat taccgggtcg acgcacgcgt ccgaccacac gtccgtgtgt gtgaagagtg 60
 aatgggaata agctgactac caagtagaat agagggacta catgaggagg tgcagatcaa 120
 ggaagtaaga gtaagagaag gagtaatgtg aatgaaagca ggaaagtatt tgaagaagag 180
 agtgtaaagc gcgtaccttt tgcataatgt ccagcgagt gaaagaggaa gcaaaacaca 240
 aaacaaaaaa acactatc 258

<210> 4449
 <211> 453
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-038-Q1-E1-D3

 <400> 4449

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gggtcgacgc acgcgtccga catcgaggca tccattttca catttgtgtt tgttgaagag   60
cagcatgatg aagagcgcta tgaagttctt tgtatttagc attattttgg caaatgttgt   120
tcttactatt caagcagcaa cggttttgga gactttggag tcaactgaaat atacagagta   180
tcttgacatg gtaaaggctg caggcctgga ctogaagttc aacgactctg ctgttacatg   240
gactgttttt gcagcaaaca atactggagt caatgccacc ttggcaccaa agcacttggg   300
tattttctaat atcacatcta atgcgacgga gagcaaagac attgtggaat atactttgta   360
caaccatact cttttgtcag atgatattaa gacaggaaca actatcctta acgccgtana   420
cggaatgaat ttgactgtgg ttaagaatac gac                                     453
  
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<210> 4450
 <211> 342
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-038-Q1-E1-D6

 <400> 4450

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ccgggtcgac ccacgacgtc cgaacgcgcg tccgcaagaa agtaagtgtg gaacacattg   60
catttgccgt atgttttgcc gagtgtcaca ggaagtgaaa gaggaggcaa agagatagcc   120
aggtaagtcc cgaggttaga tgctcttcta ctgtctatta tactgtccgc tcgacctata   180
gctgtggcag tagctgtgga aaaggatgtg gaaggggtgg catgccgggc gaaacgccag   240
acagctggaa tgctacctgg gccacctcga tagcgtagc agtagcgat gcaggaaagg   300
agaaggtaga agaagcaaag gaggactcag agcgggactg tg                                     342
  
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<210> 4451
 <211> 278
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-038-Q1-E1-E11

<400> 4451

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aagaaaagag aagagaccta gaaaagaggt aaaagaagag taaaacgact acaaaacgta 120
cggaattcac gaggaaggag cgtgaacgaa ngaggaatcc caagtaatcg atgaagaaaa 180
agcttcggtg aaagcgtgaa cggattttgt acacactgcc cgtcaagttc tggaagtgtg 240
ctangaataa gcaggagaag tagaagagag tangaaaa 278

<210> 4452

<211> 446

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-E2

<400> 4452

gggtcgacgc acgcgtccaa ctttatggac tttggatttg cacgtgtggg tgtgctcagt 60
cagaactgct tctcagttag ttacgcaata tgcctagtca taaggaacaa aataaaggaa 120
ttaaataatc agctgacggt tacgcactaa agttgagcgg tattcggttg gacgtagacg 180
gcagtttggt cactatggtg gacgcagacg acctcagagc cctcatgttt aaggaaagcc 240
tcaaggaaaa gtcaaagctg catgacccaa aatttttcaa aagctattat gaggagaata 300
aggactactt ttattatatg actcatacgg agaagaaaat gtttccttct ctggaagttg 360
cacgagaata cgctactctg gtgggaaact cgtttctgca gaaatatttg gacaaagtca 420
ttgagcacga acacgcatac taagga 446

<210> 4453

<211> 344

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-E4

<400> 4453

ggtctagaat taccgggtcg acgcacgcgt ccgaccacga cgtccgacga aaggttacct 60

atggcattgc tattcctaca attcttggtg ctgggtgttat taatgggtcat gttgctgcaa 120
 agtttatctt tactcgaatt ttccgtgggt ctcggcactt gcatgagcat actgttattg 180
 ggtgggggtac ttggattggt ctgtgtgctc ttgcctggat tattgcatgg ataatatcag 240
 aagtcattcc ggtatttaat gaccttcttg gtttagtagc ttcattatctt gcgtcacaat 300
 ttacttacgg cttgtctggt tacttttggg tatttgataa ttat 344

<210> 4454
 <211> 286
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-038-Q1-E1-E5
 <400> 4454

ccgggtcgac ccacgagtc aattgggcca ttgtgtgaag ttgtgatgga aacaactgcg 60
 tctagcaagt cggaacaaac tggtcaccag tggtctcatg gtgttgatgc ggaaggaaaa 120
 ccgaaaaaga agatgtgttg tgcgtgtccc gaaacaaaga aacagcgtga tgagtgtatt 180
 ttgcaacatg gagaagataa gtgtaaagaa ttcattgaag cgcacaaggc ctgtctgcgt 240
 caagaaggct tcaaagtga aagaaaggaa ataaagcttt tggaat 286

<210> 4455
 <211> 250
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-038-Q1-E1-F1
 <400> 4455

ggtcgacgca cgcgtccgag catacgtccg gtgcagtata gtgtgtgcgg ccatccaaat 60
 attacacatg caatcgagta aagtgaacgc gagtataaga tgggtgtataa aaattggcgg 120
 tcctaacagt acagatccat gtgtaacgaa gttaatatat gtttgatagg cgtcctgtat 180
 gcagggatat gacagtatga cactgtcaat gtcgtctaac acaacgtcac agcaatagat 240
 gttacaatgc 250

<210> 4456
 <211> 339
 <212> DNA

<213> Cyanidium caldarium
 <223> Clone ID: LIB190-038-Q1-E1-F2
 <400> 4456

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 gacgcgtggg cggacgcgtg ggttgttggg ccttgtggtg gtgatgccct ggattgagct 120
 acgtagtggc aactccgctg tcttgaaaga cataactgca agtattgaaa agcctgacat 180
 aaaatggata actaggacga atctcagtac ttgtctgaat tctgcagaag gaaatgttac 240
 ggttgacttg tcgcggcagt gtagcttgaa agatatattt tcattgaagc ttctcgacaa 300
 taactttaag ttggcgtggt ttaatgatgc cttgttttt 339

<210> 4457
 <211> 451
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-038-Q1-E1-F4
 <400> 4457

gtgacggtct agaattcacg ggtcgacgca cgcgtccgac cacgagtcg ggaacgaaag 60
 agctcttttg gccagttaag tcaaaatcgc agcagtcagc ctggtggcag tcattcacta 120
 agattccttt cgcgtcgac agttttgatt tcgacaagta tgcataata ggtttcagaa 180
 ctacgtgtat aagcctaaca tccggatggt gtgttccact cattctgatg tatctttata 240
 gcaacgcttc ggaggacaac aagcaggaat ttgtccaaac ttgctgtttt acacacgact 300
 gaactcgaag gacggtggcg ctttctcagt tcattaaaga tttcctcact taatcttttc 360
 aattcaaat acaatgctat attgcttcaa ctacgcgtca tagatttgaa tcgttcgaaa 420
 agtaaattca gccgttcagt ggacaacgac g 451

<210> 4458
 <211> 454
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-038-Q1-E1-G2
 <400> 4458

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 aggttgcaaa gcaccacaca cgtagtgact tgtggattat catacacggc aaagtatatg 120
 atttgtcttc gtttttagat attcatcctg gtggcgacca gatactttta caatatgcag 180
 gtgacgacgg taccctggaa ttgacaagg cagggcaccc agaagaagcc cagttattat 240
 tgcaagatta ctgtattggt tccgtaacga gagatttgtt tttagaatgt gatggtttag 300
 taaaactgac tccccaaca agtgtctgga gaaagtgtg gcgatggatg gacacctcgg 360
 cattggatag ctttcattgg ctgttgttac tcgttgaat tgtttctgtc ctgttgattg 420
 ttgctcattt ttgaaatgga tagttgttgt acat 454

<210> 4459
 <211> 433
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-038-Q1-E1-G4
 <400> 4459

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 aagcaactgg acctctttgt ggagtcagga aagcctgctt ctactagttt gacagttgaa 120
 aatatttcta aaacttgat atgttttaaa gtaaaaacta cacagccaca aagataactca 180
 gtacgtccaa gtgtanggt tatcaaacca ggcgaaaaga aggacattct aataactctt 240
 gaacctctca aagagatacc ggaagatcta aagtcaaaca aagacagggt cctactacaa 300
 gttgcaagaa tatcgacaga tgcagccaca acagacgttc acgagttgtg gaaaagagta 360
 aaggaagact ccgtgctgca gcagaaattt cgagttcagt ttgtattagg tggacaaaac 420
 gcagatattg gct 433

<210> 4460
 <211> 388
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-038-Q1-E1-G5
 <400> 4460

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actcgctttc ttgttttgtg gtggttgtcg ctttttgtct ctcaagtttt tgccgaaaat 120
ggttcaacag tggagagcag caggtctcac ttatcttcgt tatgcaaata tatgtgcaga 180
ttttgttcgc aaggcactaa aggaaccgaa aagaactgaa gcattgtoga ggaccggttt 240
tgagatgacg agaagcgagt ggagtgaagg caaggttgtg aagagagaga cccttacaca 300
agagaatgaa actagtaacg tcgccaagag taacaagtga atgtgtttgt tgtaatanac 360
gtctagaaga aggcgtacgt gtcanaaa 388

<210> 4461
<211> 208
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-038-Q1-E1-G7
<400> 4461

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aagaaaagag ggagtagatg aggaaagaaa gatcaaggaa gtaagagtaa gagaaggagt 120
aatgtgaatg aaagcaggaa agtatttgaa gaagagagtg taaagcgcgt accttttgca 180
taatgtccca gcgagtgaaa gaggaagc 208

<210> 4462
<211> 441
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-038-Q1-E1-H1
<400> 4462

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ctctcatatg gatgtgggcc ctgtagagac tcgaagttgg acaatggatg catttgctgg 120
gatagtggaa aacggtacaa tgtatggaag acgtactcag gatatgacga gtgttaccat 180
tcaatatttt caagcacttg gaaacctatt acagcgtgga tggaagccag atcgaactat 240
tttggtttcc gtagtgcccc atgaagagat tggagggacg caaggaatgg gagtgtttgt 300
agaatcggaa gaattccaga aatggaatat tggttttgaa ttggatgaag gattggccaa 360

tcttgactct tttatgtggt tgtattatgg tgagcgacag ccttggtggt tagttattgg 420
agctatcgat cagcctgcac a 441

<210> 4463
<211> 413
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-H11

<400> 4463

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ggtgtgtgta taaaagcgac aaaggtctgg ctttgaagta attttccgtc tccagaactg 120
caacagccta tttgcactag agtgtagtat ttgtagaaa gtccataaaa agttgacctg 180
ctaagccat tgtttgtatg ggaagagtcg cgtcattttg tattgtcggt cacaacaagg 240
ttcatctttt gatgtttttt cggttcttaa gagttagtgc agtggtgaga agtagcagta 300
cttttggtgt gagagccaat ttcttgctt cttgtttaga gacatcctct cttgtcaact 360
catgtgtctt tcgattctgt ggagttgctc tacgaaagaa gaaacttttt ttt 413

<210> 4464
<211> 415
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-038-Q1-E1-H12

<400> 4464

accacccgt caaacgtcca atatgatgca cgcaaagaag tgacgcagta catcagagag 60
tgaacacatg caagtatgta aatccagtca gatagtaaag cggctacgtt caatagaagg 120
cgttatttat tttgacaaaa atcaatcaga agtggatggt ttgagtgttc atagttttga 180
taccgagtct tctggtagag ctgtgacaca cgagctggag cgtactggaa agagttagca 240
gagcaaaata gtaacgcata cctctgaaaa cagcagaaga aaaacaaaga gaccttggac 300
cgcagaagaa gacgagaaat tggaggagtt ggtgaaacag tacggttagca gcagacagtg 360
gagtttgatt gcttccaaac taggtcaaag aagtggaaaa cagtgcagag aacga 415

<210> 4465

<211> 358
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-038-Q1-E1-H2

 <400> 4465

 cgggtcgacg cacgcgtccg accacgagtc cgggcggcaa ggagcaagaa gaacgtcaaa 60
 aggcaataga agatttcgcg agtggcagaa aggacgtcct agttgctacg gatattgctg 120
 cgaaggggtt agattttcct caagttcagc atgtcatcaa ctacgatatg ccaaaggaca 180
 ttgaagacta tgttcacgcg attggacgaa ctggaaggcg tgggaaacgg ggtcttgcca 240
 ctacttttgt caactccacc tgtaatatga gtgtattatt agatttgaaa gaacttctca 300
 tcgaagccaa acagaaagtt gcaccctttt tagaaaattt ggatgtgcac aactttgc 358

<210> 4466
 <211> 450
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-038-Q1-E1-H3

 <400> 4466

 gggtcgacgc acgcgtccga ccacacgtcc gatcacttgc acaaaagatg atgatatcca 60
 agtgcaatgt aaaagggaag cccgtgatta cggctactca aatgttggag tcgatgatta 120
 agaatcctcg tcctacgaga gcggagacga cggatgttgc caatgccgta tttgatggca 180
 gtgatttgtg gatgctttca ggagagactg ccaaaggatga ttatcctgta gagactgtac 240
 agacgatggg tggcaattgt cgtgaagcgg agagttgtat tgattacaat tataatttta 300
 catgtttgcg caatttgatg agacaacaaa agccttctat caccgaagtg attacttctt 360
 ctgctgttcg aactgctttt gacttgcacg cctcgctcat tctttgttta acggagacag 420
 ggacgactgg tcgtttggta tgcaaatac 450

<210> 4467
 <211> 419
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-038-Q1-E1-H4

<400> 4467

gcgtccgacc taatccattg tttcatggc tagtggctcc aagagcacca agtccaacga 60

aaaagtccaa atcacaaaag aacaagagga agagtttcgc gaagctttta cgttattcga 120

caaagacggg gatggtaata taacagtaaa ggaactcggg acggtgggtcc gttccttggg 180

tcagagtcc t acggaagcag agttgaaaga aatgatagca gaagttgaca aggatggaaa 240

cggcaccatc gactttcaag agttttctga cttgatgtcc aggcataatga gacaagcaga 300

tacagaagaa gagatacgtg aagcgtttaa agttttcgat aaggatggaa acggttatat 360

ttctgccgca gagctgcgtc atgttatgac cagtttaagc gagaaactta cagatgaag 419

<210> 4468

<211> 428

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-038-Q1-E1-H7

<400> 4468

cgggtcgacc cacacgtcca gagagttttc gtgcaagtta tggctgcgtt ttgcgctggt 60

tgcatacttg tctcaagaag caacagttcc aaagagtgat tggtagcgtg gaattctgta 120

aggaaccggt agttggacaa aaaagtgcaa cacaggcacc tacgggtccaa caaagcaccg 180

attcacaaag ctcaagtttg aatggattta gcaacgagcc aatggatatg aatgagtgga 240

aacgtaaata tagtaatacg gacacaagaa cggaagcact tccttgggtc cgggagcact 300

ttaatccatc ccaacttcct ttgtggtatt gcaagtacaa gtataacaac aagttggaaa 360

aaacttcatg tcngcgaatt tggatatctgg atggtttcaa agattggagc ctttaagaaa 420

gtatgctt 428

<210> 4469

<211> 415

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-A10

<400> 4469

cccgggccga cccacgacag tccatgctcg tccttggcca ggtattttta gaacgttatt 60

gaatgatcat cgaagatttg aagaaaccta ttttcatcca tttcctgggtt attactatac 120
 tggagatggg tgtgtaaggg atgaagatgg ttgttattgg ttgagtggaa gaatagatga 180
 tgtgattgga gtaagtgggc gtcgaattgg aacgaccgaa gtagaatctg ctcttatttc 240
 tcacctcat gtggctgaag ctgctgttgt tctgtgccg catgaactga aaggacaagc 300
 tgtttatgct tttgtcactc ttcgagcaaa tatccaacct agtgaaaact tgcacttgga 360
 gttgcgacaa gtagtaagag aaaagattgg cgctcatgct gttccagaaa tgatt 415.

<210> 4470
 <211> 428
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-A12

<400> 4470

ggtactagtc cagaattccc gggccgaccc acgcgtccac ccacgcgtcc ggagcttccc 60
 ctggcgggacg tttttttcgt gaagcaaaca acaacaacaa caactatcgg tcgcgcaatg 120
 cttacagtga aaccccatca caacttggtg aaatgggtat ttttcaacat ccctgcgaga 180
 acgaactagt ttgtaagagt accaacgaaa agatcccgtt ttttaacgct ccaatatattc 240
 tggaaaacaa gacgcagatt ggcaaagtgg aggaaatatt tggtcctatt acagacgttc 300
 actttactgt aaaaccagtg gaaggtgtat tagctacttc ttttggtgta tgagacaaat 360
 tctacatcgg ctacagagaaa ctgctgccgc ttgaaagatt tcttcccaag ccacctggta 420
 gtcagagt 428

<210> 4471
 <211> 182
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-A4

<400> 4471

agagatatat aggtgtaggg tgaagtgggt gctagtttct tgaatgcttg gttttgcac 60
 aagttatata ataagtattg caatagctcc ataaaaatgc aatactagtg ttcttttttg 120
 gttaaaacaa gtctcacaga acagttgaaa gctcgcttgg tccaataaaa aagaaaaact 180

<210> 4472
 <211> 202
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-B1
 <400> 4472

cgggctcgagc cacgcgtccg cccacacgtc cgcccacgcg tccgggtcgt agcgctattt 60
 ccctggcttt attttcgacg gatgaatcct ttgattccga cgaggaatga ctgcttcctc 120
 aacaactagg atcgcgttga aagaagatat ccaaagtttc tttctagata tatacggtaa 180
 agataaattc gaattgattt gt 202

<210> 4473
 <211> 424
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-039-Q1-E1-B10
 <400> 4473

gtactagtct agaattcccg ggccgaccca cgacgtccga tttaatcgtt caagagacac 60
 acgactagaa aagcttacgt tctgtagatc tacgagtcgc aactattcac caatggaatt 120
 tcctgtacaa aagctacagg aggaagagaa agaaacttta atagacactt tgccttatgt 180
 ggaagaaaac ctcttggaag actcagaaac ttctcgaaag gtcgctagcc tacttgagca 240
 ggaactgagc caagtgaaga agaagaaatg ggaggaacaa cagacacagg ggtttctggc 300
 aaacaccttg gttggaatag aagttcaaag aatggaggac gggttgccct cggagtatga 360
 aaatcctttt acgagatacg aagtttctca cccgaatatt acanaacaag gggatttgaa 420
 cacg 424

<210> 4474
 <211> 430
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-B12

<400> 4474

gtactagtcc agaattcccg ggccgaccca cgcgtccacc cacgcgtccg gaacgcaacg 60
cggcgcattg aaaattcatg atgaagttgt tcgtagaaaa ctcaaagtat ccgttgttgg 120
cattccaaag acgatagata acgatattgc acttattgat aaaagttttg gattcgatac 180
agcagtagaa gaagcacaac gagccattcg cagtgcagtt gttgaatcga aaagtgccca 240
aaacggtatt ggcttagtga agcttatggg taggagttca ggatatattg caatgtatgc 300
aactttggct tcgcatgatg tggatatttg tttgattccc gaagtatctt ttattttgga 360
aggaagttgt ggtttgtag aatatatccg cagcttggtg aaaaggaaag ggcattgcgt 420
cattgttggt 430

<210> 4475

<211> 413

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-039-Q1-E1-B2

<400> 4475

ccgggtcgag ccacgcgtcc gaccacacgt ccgaaaagac tcaagtaatt gtatatttgt 60
ttttggttgt gttgctgtan ggcaaataatg agttcctttg atccggacaa gttcaaacaa 120
gaacaaaaag ctcgctggaa tcaaggagct ttatccacgt ggaccctgtg gaaaaaaact 180
caagtagaag atactccagc aaagttcttc ctaagcctag tacctattcg accaggagtg 240
aaaatcttag accttgcttg tggtagtggg gaaacctccc ttcaagttgc tcacctagtt 300
tccagccact taaaggatga agccaaagac gcaaagatag tttgcgttga tatttcggac 360
gaaatgctta aagttctcaa ccaaagagca caagaaatgg ggctaacaaa tat 413

<210> 4476

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-B3

<400> 4476

gggtcgagcc acgcgtccga gagcatatgc cgtcctcctc ttctagcgat cattcttttc 60
 ccggaactaa aaaaaagttt ggaaaacttg ggcggttccg aaaaaggccc cgatatatg 120
 agaaaaagaa tggcagtaag gtttcctgtt aaaggcagtt gaaacgaaca acaacaagt 180
 gtgggataat tccaattcaa gtaacgcttc aaaacggcaa agtgaagatg gctatcaagg 240
 ggaaaacaaa acctagggat atatccaaag agttatttcc tgatttagcc aagagagcta 300
 tagtggcagt ggtcaacgat aaactgtggg atctgaatag acctctagaa gaagattgta 360
 gcttgaaaat atgtgacttt gaaactccag aaggaaaatc agta 404

<210> 4477
 <211> 281
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-039-Q1-E1-C1
 <400> 4477

cgggtcgagc cacgcgtcca attcaagtgg tgtagaaaaa gatattatta cacacgnaaa 60
 aaaatggata tttggctagc aatccttgag gaatacgtgg cctatccttg atcgacaatt 120
 atttcaagta tctgatgatc aaatttatcg aatacaatgc gaaatgagaa agcgagtggg 180
 tgagttttcc gatgaaacgt ttgccaccga atttacaaga cacttgctct ttcctcgtca 240
 ctctacttga gtataaagaa tttatgtttt atattccgtg g 281

<210> 4478
 <211> 395
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-C11
 <400> 4478

acggtcagga attcccgggc cgaccaagc gtcagggctt ctttcacaat gtttactgct 60
 tgactgtata ttcacttgct attgttcacg tatacttccg tgagggttg agcttgctg 120
 ttttgcgtg catagtacac ctagagattc tggaactgga agtttcgaag atctttgagc 180
 aagtccaac agaattgacc tctgcagatg cttttcattc ccaagaaatt tctactgagt 240

aacaatttca tatgcagcgt gagttttttc cttacgcaaa ctatggacgc atttttactc 300
gaagatttga gctttgtctg tgaacaccag agtcagaata taatttatcc atgtaaagtt 360
tgccgctttg ttcgtaagtg aatgacactg tgtgt 395

<210> 4479
<211> 206
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-039-Q1-E1-C12
<400> 4479

gtactagtct agaattcccg ggccgaccca cgcgtcaaga gttggccaag cacgcagttt 60
cggaaggaac caaggcagtt acaaagtata cttcttcctg aattcaaggt tgataaatag 120
actagcgtac aagtgttttt gtgtgttttg aaaagtttgt atggttgaaa agcgtcgatg 180
tacaacgtaa aaagaaagtt ttttat 206

<210> 4480
<211> 419
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-039-Q1-E1-C3
<400> 4480

gggtcgagcc acgcgtccga tcccaatgag caagtctacc catatattct tcggtgcctt 60
tcttgttctt ctcacaagaa tatgtatctc ttcagctgca tgttctgact cagtcattgtc 120
tcagatgcaa agtatttttg tcaagaattt cactcaaaat cgtgcattag ctccattatg 180
ccttagaggt gcttttcacg attgctggaa tggatgtaac ggagcactgt tgcttccaga 240
ggaaataagt agagctgaaa acctcggtt ggaacctcta aaaccatatt tggaaccatt 300
tctcagccag tttccttgtg ttagtgtagc tgacctgatc aactcttgcg ccgttacagc 360
tgtaaagttc ctaagtggtc cagatgttcc tgttactttt ggcagaatag ataccggag 419

<210> 4481
<211> 401
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-C4

<400> 4481

acgcgtccga agacaactat tctcgtgctc catcgttttc tagccatgtc tcagagaaat 60
tattgcgaaa tagcaatact tctgagtttc gcgagccaca cttgtatcga gactctcaga 120
ataatccgga gaatactttt ttgacagatt tacctgcgaa tgaacaagaa aatatgagac 180
ggctatcatt tcgagattgg agtctcgcag agtcactcga tactgttact cctgctgtat 240
ctagaccgat tgctgttcat ggaccaaaat attcacctca aacgacgaca agagaagctg 300
ggtcggatat ccgagcggaa cgtgaacttt ggcaacggaa aggacatttg gtgaagtttt 360
ggcgacgacg atttgctgct atactaccac attctgtttt t 401

<210> 4482

<211> 404

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-C5

<400> 4482

cgggtcgacc cacgcatcca gcgtggagat agagcaacgg cagcaciaag tttagaactt 60
cgagttccgt ttcttgatag agactttctg gatgttgcaa tgagtattca tccgcgtgaa 120
aaggttactt ctaagcatag aatcgagaaa tatatcattc gttatgcctt ttccaaggag 180
ttttgtggtg aagagtatct tcctgacgat attcttttga gacaaaaaga acagttttcg 240
gatggcgtgg gctatagctg gatcgatggg ttaaaggcgt attgtgaaaa ggccgtttcc 300
gatgcagact tgcaaaatgc cgctcagcgt tttccgcacg atactccaac aaccaaagag 360
gcatatgttt atcgagctat attcgaaaaa cattttggga attg 404

<210> 4483

<211> 323

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-039-Q1-E1-C6

<400> 4483

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actctacgtg caacttatct tgtgacatac aatcggttgg canagttata tgctagcgta 120
 tcatagatgg tacatgtgta gaagatgtca gcacatgttc ttgcggcttc agcattacaa 180
 tggagtttct atcaaagat tacaatcaat acttgatggg ctggtttaat gatgataagt 240
 ctgtcaatgt ccaggataat agatcttcga aatcgcaata agggtaagga agaaaatcct 300
 ttggctagga taagtaagga aaa 323

<210> 4484
 <211> 235
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-C8
 <400> 4484

cccacgcgtc cgcccaggcg tccgaggtag gatattttgc ttggcttagc tttattatgg 60
 ctgtagcata tgcttccaac tcccgtttct ctcaagtata cgtgaaacag ttggtatctg 120
 cagttggtct aagtatcggt atcttggtga tatcgatatt gtcaccctct cctcctcctc 180
 gtccaactgc ataaaagtttt ttcattgttc aaaagccgtg aaggacatca ataata 235

<210> 4485
 <211> 416
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-C9
 <400> 4485

ccggggccgac ccaaactgtca acccagcggt ccgaaaacgt gtgtagcaag cgtagagcag 60
 aagaactggg tgtaaagggtc gagtagtaga gtaagtgtaa aagggaaagg aaaggagaga 120
 aagaggaaag ggatgaaatg cagagatctc tagagaaagg caagaaagaa aagaaaggaa 180
 gacacagtaa atgaggcgag aaagcatagg aagtgaacg gattaggaac ccgtgtagtc 240
 tatgcagtaa aagaaagaat gagtaagaaa aaagggagtc attccaccag gggagtaaag 300
 gcgcaagaaa gaaacccaaa gcaattgacg ggaatcgga aaaggggtgg atcacgtaaa 360
 ttaatccgat gtaaaccgag aaacttacct ctccaagaaa gtgtttcacg gctgtc 416

<210> 4486
 <211> 414
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-039-Q1-E1-D1

 <400> 4486

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 tggagcaatt tgaagtggta tcgctgtata agatggagat agaaggaacg gaaatacggg 120
 taagtaacat acgagtgtat ataataatga tgagtatagt atgggtaaag aagatggaga 180
 ggaggataat gaagaagaac gggacgtggg agtggatacg agaggagtat tacagagtga 240
 taggaaggat agtaaaggag aatgtacgag aggagaggta tataaggaag gattacatga 300
 acgacgagat aatatgagaa atgataacgt ggatatatat atcgataata agtgtggagt 360
 aaacagaaaa cgaagtaaaa cgacggaatg aacggaagtt atggcaaaaa cacg 414

<210> 4487
 <211> 412
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-039-Q1-E1-D10

 <400> 4487

 cgggccgacc cacgagtcaa caaccacatt gtttgcaacg gaaatgattc gatgacttat 60
 gatgaccctt cagtagttct tccaaccagc ggtaaccctc aactatccta gtgaaaaagg 120
 acctctttct cctcgtttta gaggggaaca tgctcttaga agatatccat ccggacagga 180
 acgctgtata gcttgcaagt tatgcgatgc aatttgtcca gctcaggcaa taactatcga 240
 agcggaacct cggcctgatg gttcaagaag aaccacatga tatgatattg atatgacaat 300
 gtgcatatat tgtggtatgt gccagaagc ttgtcctgtg gatgccatcg tagaaggctg 360
 caattttgag tatgcaacag aaacgcacga agagttgctg tataataagg aa 412

<210> 4488
 <211> 414
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-039-Q1-E1-D11

<400> 4488

aattcccggg cgcacccacg cgtccacgag aagttgtaaa acttggtgtc agaaccaaga 60
aacattttacg agaacaaagt tatgcattta ctgaccaaga tgggtggtaga acaatgcaac 120
tgggtatcaga gttccttttg gacgttttga aattcctttc gacagatcct cagactgaaa 180
tatcagcact agttcgagaa atattgaagg atatgagcag tagctctagc gaggagcaaa 240
tgcagcgtgg aagcgttgcc aaaaaatcca gtgagcatat ggatgtcgca tcgaacgcat 300
cttccttggtc ttcacacca ggttcttttg aagaagtcac gcatagtaga aaggattctc 360
ttccgagaag ctccaattcc atgcctcgtg tcatgtcgat agaaggaata agtc 414

<210> 4489

<211> 430

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-D12

<400> 4489

aggtacaggt ccagaattcc cgggccgacc cagcgtcca attcgcttgt ggcgtgtgaa 60
gttttggtta ccttgaaata atgcagatat ttgtaaagac acttacaggc aagactataa 120
ctcttgaagt ggagccttca gatactattg agaacgtcaa gtccaagata caagacaagg 180
aaggaattcc tccagaccag caacgtttga tatttgctgg aaagcaacta gaagatggtc 240
gtactctttc agactataat attcaaaagg agtctaccct tcaattggta atgcgtttga 300
ggggtggaat gcagatatatt gtgaagacac ttacaggcaa gactataact cttgaagtgg 360
agccttcaga tactattgag aacgtcaagt ccaagataca agacaaggaa ggaattcctc 420
cagaccagca 430

<210> 4490

<211> 439

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-D2

<400> 4490

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ccaaaactcc aagtatgttt ctcgatattg aaatgaaacc tggttgtgta atgaatccac 120
 aaatatctca cgaatctcga tgctttatat acgtttttaca aggcaaagct ctatttggga 180
 aagatgcttg tattggaagt gcacacgagt tgttgctatt ggatggagaa gaagatcata 240
 tcgtgtgtca aagcaaggaa gacagctgtc gatttgtgtt ggtagctggg aaacctttga 300
 acgagcccat cgttcaatat ggaccttttg tgatgactag ccaagaagat attatgaaag 360
 cttttcgaga ttatcaaact ggaaagtttt aaaattgccg aaataaaacc atttgtgtat 420
 tcccaactaa aaatgtgta 439

<210> 4491
 <211> 349
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-039-Q1-E1-D3
 <400> 4491

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 gaagactgaa ccaggaaaag tatcaaattc gattggctat tacgccgtat ttacaagccg 120
 aacatgaccg tttggaagtg aaagagacgc atcgtcgtct tcggcaagaa gcagaactta 180
 tgaaggatgt tcttgaatat caaccgggag aaaatttga caaacaaga aagtttactc 240
 cctatgtcaa accgctagta cctggagttg gtccacaagg actttgacag ttatctaaag 300
 tgatggttgc caataaagct ggaatggagt ttagttttgt gcacaaaaa 349

<210> 4492
 <211> 371
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-D4
 <400> 4492

gggtcgagcc acgcgtccga gatcacaaga agcagcagta ttagcacatg cacagtcatt 60
 gctcgagttt catgcacgtc atcaagtaat gtggaaagtt ttggggttcc acccgagtaa 120
 aaggaatggt atcaaaactt tatgtagttc gggttgtgaa tgaaggttcc tagaatgatc 180

tgggtactaat gtttgcagta gtaaaatggt gattacttgc taatgggaag acacgcgagt 240
 tggccaatag gtcgatatag tgttattgca ggtttcatgg aacatggcga aagtatagaa 300
 gatgcaatth atcgagaagt aaaagaggag acctttattc aagttggtcg ttgtcggat 360
 cattcttcac a 371

<210> 4493
 <211> 407
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-D9
 <400> 4493

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 gcaacatcca tgtcgaagaa ggaatttaca tttggggtat cataacatat tatatgtttt 180
 ggggttctgg tatgggacct tatgcttggg tactgggacg ggaaatatat ccaacttata 240
 ttccaagtga aggaatggcg ctggttactt ggtggacata cattggaaac tttattacga 300
 cttattgctt ttccaagatg aaaagagcaa tgactgctcc aggaattttc attgggtttt 360
 atggagggtt tggtactatt gcttgggttct atgccatgtt tatgatg 407

<210> 4494
 <211> 410
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-E11
 <400> 4494

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 tggaagaatt ttgcaaatag agcagtcttc aatgagggtc cagtttttca atgcaaacct 120
 gtttcaggaa tccatgtgaa tcgtattcca aggagtcttt tgcttcttgg agacactagc 180
 aacccttcga gctttgttga gatcgcgaaa cattgcgatg gacttggttca tgaagcgacg 240
 ttcttggaag tattgcggga taaggctgct gagtcgtttc attctacagc aaaaatggca 300
 ggacaatttg cgtcatcact aggaacaaga acactgattc taactcattt cagtagcaga 360

tatgaaacca actttttacaa gtcgaatggc caagtttttg acgaaacttg 410

<210> 4495
 <211> 432
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-E12
 <400> 4495

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 gaacctcccg agttgttaga acccaagttt cgagcttttg gagtggagaa caatgcagaa 180
 acgagaagga cgtggcgtga aatattatat ggaaccaaag gattggagca atatgttgca 240
 gctgctattc tgcatagtga aacttttgaa caacaagatt catccagtgg gaaacgtttg 300
 gtagatgtgt tatcagacaa aggtatatta cctggtatca cgggtggatca aggtttcgat 360
 atattacctg gtacctcca agaaacattc acgctaggat tggatacttt gagcaatcga 420
 tgtgagaaat at 432

<210> 4496
 <211> 440
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-E2
 <400> 4496

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 aatagtagaa gaggaacgt cggaatcttt aagtgaaaaa gaaaacgaac aaggtgcgta 120
 tgagcaagaa gaagcagaag aagatagcca tcaacacaca catgaaggag gacacgcgca 180
 tgaacacaca gcagaagagg gaacaaccag acaaagcaaa gcggagaaga aatctagaaa 240
 agctttgcag aaattgggtt taaaatcagt ttcaggtgtt acgagagtaa ctatcaagaa 300
 gaacagaaat attctgtttg ttatctcccg acccgatgtt tacaagtcgg ccgggtcgga 360
 tacttatgtt atttttgggg atgcaaagat agaagatctg tcagttgctg cacagactgc 420
 tgcagctgaa caatttaaga 440

<210> 4497
 <211> 399
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-039-Q1-E1-E4

 <400> 4497

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 acaaaagttg acgtttccct tattatctga tgaaggcggg aaagtacgca agctatacgg 120
 tgtaccaaag agcatgttta ttatgcctgg tcgctgcact tatgtcattg gtccggatgg 180
 tattgtacga cacatctaca acagtcaagt acgtttcgca aaccacgtgg aggaggcaaa 240
 gaaggcggtg gaaaagatac gaaacgacgc tcaaacagca gaagagtga cacactagac 300
 tgctttgtgg tttctttgat aagaagaggg ttccagtcac gtgcttcggc tgggtgtggca 360
 agttactttg ttagttgtgt tgaataaacg tttgttttt 399

<210> 4498
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-039-Q1-E1-E5

 <400> 4498

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 acagaagagg agttatgaga gaaaagatgg aagtaataga agtggttaagt ggagtaataa 120
 tgaatcatat gaaagaagga atggagaata taaggaagga ttacatgaag gaggagataa 180
 taggagaaat gataagggtg atatatatat cgataataag tgtgatagta atataaagga 240
 ggagatagag aggaaagagg tgtatgatgc aggcaaagaa gtgacgcagt agattagaga 300
 gtaacacatg caagtaggta aagcgaacgg gtgagtaaag aggtgtgaaa gagtggaaga 360
 acatgaaagc acagaagaat gtaagaaatg gttagagtaa aaaccataaa ggaagtaaaa 420
 gcgggaatct g 431

<210> 4499
 <211> 467

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-E7
 <400> 4499
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 tggtttgagt acaaaaggag ataggaatgc gcttattagg aggcataaag aattcggtaa 120
 gtaagttaca attcaagcga acatcatctg agtagattct caagtctttc gctataatgc 180
 tgagctggat tcaaagttcc ctctgtcctgt ttcgtccgtc ataaaggata tcgaagaatg 240
 ggagaagcaa caggagtgga tgaatgtttc tgaggaagcg tctaaacttc cattaggaag 300
 gccactccct gtcaataatg atgcctgtca cattgtcacc agtgatttcg aatcactcgt 360
 ccagcaagca aagagaacaa gggtaaagac gggaaacaac ttttgtgcgt caaactttta 420
 tgaagaaagc atgggtcaag atgatatatc agtgtttact caacaag 467

<210> 4500
 <211> 454
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-E8
 <400> 4500
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 cggaatctcc atgtatcctt gttactggcg agtttggttg gtcggccaac atggaacgta 120
 tcatgaaggc acaagctttg cgtgattcgt ccttggaat gtacatgtca tcgagaaaga 180
 taatggaaat taatcccaac aatgccatca tgcaagaatt gcgtcgccgt gtggaagcag 240
 acaagtcaga caagaccgtg aaagacttgg tcaatttatt atttgacact gcattgttga 300
 ctcccgatt ctctcttgac gattccaacg tttttgcctc tcgaattcat cgcattgatta 360
 agttacgtct tagcattgac gaagatgaag tcacagaaaa gatggaggaa gatttaaccc 420
 ctctcgagac cgaacaggaa ggaacgtctg cgat 454

<210> 4501
 <211> 413
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-E9

<400> 4501

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agacttagta agagcggaca gggaagaata tgcttgtctt ctggaagaaa ataaccctcg 120
tcatttctctg gcgcttatca tcctgtggga tcagttccca cgaaatatgt tccgtaaaga 180
cgcaaaagcg tttgcgtggg ataccaaagc gtttgcgtta tcaaagcagc ttgtttcttc 240
gtctttggac aagaagcttc gtccaatcga gaggggtttt gcttatatgc cgttcgagca 300
ccaggagaac ctacaaagtc agtctgaggc aatgagactc tttcaggaac ttaaagagga 360
aacctcgcgg attccggatg aagcaaccaa ggccaagttc acagaattca cag 413

<210> 4502

<211> 186

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-F3

<400> 4502

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atgaaatgca aaaatctcta gagaaaaggc aagaaagaaa agaaaggaag acacagtaaa 120
tgaggcgaga cagcatagga agtgaaacgg attacgaacc cgtgtagtct atgcagtaaa 180
agaaaa 186

<210> 4503

<211> 189

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-F5

<400> 4503

accacgcat ccgaccacgc gtccgattaa aaaaaaaaaa aacaaatata aaaaataaat 60
gaaaaaaaaa ataaatgaaa cagaaggcaa tgcgatcgct ggggttagtc attggtacaa 120
cttcgatcaa aataccagtt cttaacttgc tgtcacatag tttcaattcg ttggcaatcg 180
tatttcttg 189

<210> 4504
 <211> 292
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-039-Q1-E1-F6

 <400> 4504

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 aagggaggaa agaaagattc ttcaaagaaa gaagccacaa gtaaacctgc agcagcagat 120
 gctacaaaga cgacagaaaa gtctgggtccg gaagccaagt tgaagggaac tgggtgcaaag 180
 aaacaataaa aagttgacta tgcattgtgca gtctgtttat gttttgtgag ttctgtttga 240
 tagtttccag ctattctttt ggtagtgaat aaagagaaaa ttttttatat tt 292

<210> 4505
 <211> 287
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-039-Q1-E1-F7

 <400> 4505

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 gaattttttt tgaagggtgt taccgagaac ccgtgtgaag agctttggag agcttaccag 120
 agatgtgtaa agagactggc ttcttccaga aatcttgaac agctattgac ttcagactgg 180
 aatgtggacg aacaaaaagc tgctacttg acactcgtgc attccagtgt agataggacc 240
 acgaataaaa aattgtttac ttgaaaaaaa aaaaattttt taaattt 287

<210> 4506
 <211> 409
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-039-Q1-E1-F9

 <400> 4506

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cagcagcagg tcttggtgcc tttagaccttt cgggttttagg accggaagac caaggcaagc 120
 ttatggctgt tatgcaagat cttcagatac aagattctct taggctatac aacgaacttg 180
 tacaacgttg ttttggtgaa tgtgtcgaaa cttttagaag taaaaaactc gatggaaagg 240
 aagaagcttg tgttacgaag tgtgcacaaa agtttgtgaa aatggctgct agagtaggac 300
 agagattcgc agaacagcaa cagcaacttg ttgcagaagc gcaacgagga tccacgcctg 360
 cttcctgaaa taaatgtgaa ccaactgata gaggatcatt ttgtttctt 409

<210> 4507
 <211> 309
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-039-Q1-E1-G1

<400> 4507
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 ctatgtggca cttgaaacaa ataggtacaa cgaaagatgg ctcagccact ggagtcgtgt 120
 tgtctttatc ttcaaaagat gtggatgctg catggacctc tgcgtggcct tatgctttta 180
 ctgccaata tcagttgtta tangggtttc aagggtccaca aacaattttc ggggttcaaa 240
 ttgagggaaa ggatcctttt cctttaactt tggcttttca aactaatttg gaggtaccga 300
 agttcccaa 309

<210> 4508
 <211> 400
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G11

<400> 4508
 gtacaggtct agaagtcccg ggccgacca cgcgtccaat caaagtaaag aaagaaggaa 60
 aaggagaaga agagagggta ggcttagaag cagcaaacca gagaggaaag cgttaaagca 120
 tgaaagaaaa gaaatccgaa aaagaagaga aaaaggtaag aaagaggacc gaatcagggt 180
 aagaggtaga ggagcaagaa gagaagagag aatgctgggt ggagtagcga aacaagagaa 240
 gggaagtaaa aggtaagaaa gaggaagggt ttacgagaga aggaagtaga aagaagagag 300

tgtaaggcgg cgtcataata gaaatccgaa aggagtagaa gaaaagagag agaagaaaga 360
aaagaagaga aaagccgtac tgaagaccga cacaggtact 400

<210> 4509
<211> 127
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G3

<400> 4509

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ttctctcttt ccttatcgct gccgcagttg cagccgacgt agtttcagag gagagatggg 120
gatatgc 127

<210> 4510
<211> 307
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G5

<400> 4510

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caaataaata caatacaatg ctgtcattgg tcgtttcgta gatttggtgt ttcactaagt 120
gcagtcattt tgaaatatgg agtaaacata atgaaacctt gtatgagaaa aaatcactaa 180
tcaacatcag atgttctact tgagtacatc cttttgcaaa agtgcgacaa cttgtttcag 240
acatactaca acttcaactg catacctatg aagactactt tgtagaacta atggctgaag 300
aaaacta 307

<210> 4511
<211> 436
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G6

<400> 4511

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tggagaagag atggagtcga agcaatcttc atgatgcgtg gaatactagt ggtgcaagtg 120
 aggataacga acaactgcaa caagtgatag acaggttgtc tacgtggcaa aataagaaca 180
 cttgggacat tgaaaacgaa tcctggagca acaagcagaa caatatcaaa tattatagac 240
 tagtacgtca acaactacag tatctcgttg ggaatgccgc ggttgcaaga caatgggaag 300
 tcgtagttgg tggtttgact gccttggtgc agtgtgaaga gttgagagtg gtgttgaaga 360
 acttgcatat cgattgggtg gcttgggtata gagatggtct agaaaagagt caggttgccg 420
 ggtatgtttg gttgtc 436

<210> 4512
 <211> 366
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-G7

<400> 4512

gggtcgaccc acgcatccgc ggacgcgtgg gggaagtaga aagaagagag tgtaaggcgg 60
 cgtcataata gaaatccgaa aggagtagaa gaaaagagag agaagaaaga aaagaagaga 120
 aaagccgtac tgaagaccga cacaggtact cgaggagaaa ggagacccaa attaaggtga 180
 gagaatggac gataaggaac tatgcaaaag gatatggtat ctgcggtaga acatatgaaa 240
 gaagcagcac cgactgttta gcaaaaacac agcactctgc agaaaagaga aaatgtaaag 300
 tatagagtgt gcggcctgcc aaatagtaga gaagaaatcg atgaaagtga aagcgagtaa 360
 aagatg 366

<210> 4513
 <211> 452
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-H1

<400> 4513

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 acgcgtccgc ccacgcgtcc gcattgttga atttttctgt ttcgtttact tgtctttttg 120
 ttgagttatc atggcacgaa caaaacaaac agcacgcaag tctaccggtg gtaaggcacc 180

tcgaaagcag ttggcaacca aggcagcaag aaaatccgca cccgtaactg gaggagtga 240
gaagcccat cgttaccgtc ccggtactgt cgccctgaga gaaattcgca agtaccagaa 300
gagcactgaa cttcttatcc gaaagttgcc tttccaaagg ttggttcgtg aaattgctca 360
agactttaag acggacctac gtttccaaac ttcggcggtg actgcccttc aagaaccctc 420
gggagcatatc ttggtcgggtt tgtttgaaga ta 452

<210> 4514
<211> 418
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-039-Q1-E1-H10
<400> 4514

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aagataaatg gtcgtcaaaa cagaaacctg tagtttttca ggtttccgca tctaccccg 120
aaaaggcact cgattttgtgc gcgggggatgg caaactcctc atcttttagta accgcaagt 180
caaatcctac tttcatatgc gtaggagacc ggcagagttg aattggactc agttgtatcg 240
aagaatgcac aaaataggac agcaagagga gacacagaag cgacgtcgta cgcgcaaagt 300
tgctgctgta ccgaaaccgg tggaaggcgc gtcgttgaa gtgatcaaag caaagagaac 360
gcaacgcccga gaagtccgaa aaactgccaa agaagcagcg ttgaaggaaa tcaaacaa 418

<210> 4515
<211> 165
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-039-Q1-E1-H11
<400> 4515

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ttgcagtgca ccgcttcgtt ctttttttct catcggaata cagttcaaca actctgggtg 120
caaaaaacag cttggatgaa ataaaagaac ccacgacttt tatct 165

<210> 4516
<211> 414

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-H12
 <400> 4516

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attccccgggc cgacccacgc gtccacggac gcgtggggtt ccatectatg aataataata   60
ataataacaa gcaagacttt ggtattattg ttactttatg gaaacaagta acagtgcacac  120
aagatggaaa agttcctttg gataccttcc taactgctgc aaaggaagtt ttacgtgtgg  180
tagatgcctt tggttcaggc ttccgcattg taaagaacga tattgctgga aacatcaaaa  240
aactgtatcg tgccaatcaa tctgttcaag ctaccacgtt acaggatctt gtcatatcag  300
aaaactctcc agatgggttg gctactgttg cattgttatg gttgaaaagg taaaagtcct  360
ctctcgcttt tgtgtcctag agacctcacg atgaatgggg tgcagagctt ttca      414
  
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<210> 4517
 <211> 424
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-H3
 <400> 4517

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aggtaagaaa gaggaaggt ttacgagaga aggaagtaca aagaagagag tgtaaggcgg  120
cgtcataata gaaatccgaa aggagtagaa aaaaagagag agaagaaaga aaagaagaga  180
aaagccgtac tgaagaccga cacacgtact cgaggagaaa ggagacccaa attaacgtga  240
gagaatggac gataaggaac taagcaaaag gatatggtat ctgcggtaga acatatgaaa  300
gaagcagcac cgactgttta gcaaaaacac agcactctgc agaaaagaga aaatgtaaag  360
tatagagtgt gcggcctgcc aaatagtaga gaagaaatcg atgaaagtga aagcgagtaa  420
aaga                                             424
  
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<210> 4518
 <211> 433
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-039-Q1-E1-H5

<400> 4518

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ctcttctcgt tcctagttgc aataatcggc tctgtaatat cgtctgccac tcctctaagt 120

gaaagatggc aaagttctac ctcttgccaa gagacatgta agacagtctg tattcaaacg 180

cagatatgtt caactccaac acctacacca actccaagtg tttctgcgca acaaggaaac 240

gtataccgct ggagtggagac gtatgcaact cctactccaa caccaactct tgtttgtact 300

tatgttccgc agtgcactca agtttgcagc agcaaagcc caagtcagac aacttctgcc 360

gtagaaagca acagttatac ctctcttctt actcaatcct ctaccacatc aacatactat 420

tatggtgctg ggc 433

<210> 4519

<211> 302

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-H7

<400> 4519

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tactaccaat gccaaaagta taaggagggt actcagcaag aatgccagta cgtccaagag 120

tcgtattgtg tcgagtatga agaatgtcag caagttaccc aggaagtttc tccttcagaa 180

attgtctact acggtgaatc ttcttctagc agtagttact actactagaa cacttgtgaa 240

atgcgcaaag tcgcaaagta gagtgttctt ttttgaataa actgttactt tttgtcataa 300

aa 302

<210> 4520

<211> 433

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-039-Q1-E1-H9

<400> 4520

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aagaacacaa caaaatttta caacttgcgt ttcatagttt tggaactaac ttgacatgca 180
 acaaagtaac cttecgagtag tccaatcttc tttggtggca agctttgtcc tcattctaag 240
 tataatctgt gccattcatg cagtaacagc cgatgaaata acaagtttcg agagaggata 300
 ccaaacagtt gcaccaactc agacgcagca atgtcaaaag atttgtgtca ccgccacaca 360
 aactcaagtt caaagttgta tttatactca gacacaggct ccgttcattgt ctcaatgtgt 420
 cacagcattg cca 433

<210> 4521
 <211> 424
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-A1

<400> 4521
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 tgtgtggtgg ttggggacga cgcgtcacgt ttggatttgt gtggtatttg aatggcgacc 120
 aacagaataa ccaaatagtt gcgacacttg ggtatcgacc ccccttctaa ctgtggtgcy 180
 gggcccgtag gggacgacct ctttactggt ctagctacta tcatggggcc tcctgactcg 240
 cgatatgccg gtggagtgtg tttcctcaca taccattttc caaccgacta tccgttcaaa 300
 cctccacag tgcaatttag cactcgtata tatcaccga gtcttacctc caatggaatt 360
 atctgcttga ataattctcg cgaccaatgg agtccatcac tgactagctc gaatgtgcta 420
 ctgt 424

<210> 4522
 <211> 415
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-A12

<400> 4522
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 acagacaagg ttggtgacta cctgaactgt gtccaagtcg aacgagtgca tgccattgcy 180

aacagaggac ccaatgaact gtttgcaagc ggagcacttt ctgaactaca gtacgtcctt 240
 ttccggctta tctaaagtag gagtggagtc ttcccatagc tgcagtcgac gagacaagta 300
 taccggtttg tgtgtcgatg gcgaaacagc aacacggttg taccaggagt cttgtcctca 360
 agtctattct tctggcataa aagacaagga tagtttgtct atgaacaagg aaaaa 415

<210> 4523
 <211> 454
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-040-Q1-E1-A5
 <400> 4523

aatgccccggg ccgaccacag agtcagggtgc ccgttcacag caaacgcagc cgcagacgac 60
 ctgaattttg gagacgaata cacggagaac ctcagaaata cgatacagaa cttcccaacc 120
 cccaagaaga tatatgaagg tctcaatgaa tatgtcgtag gtcaagaaaa ggccaagaag 180
 gttcttgctg ttgcagtcta caatcattat aaacgagttg ccctcaacga atacttggct 240
 tccctttcgt cggaacacag agaagtcagt' gatgctggca caagagggaa tgggtggcgca 300
 agtaactttg atgggaggac tcaggacttt cgtgtcggcg aagttcagtc tccttcaaca 360
 gaagaccttg cttcaatagt gcctcagaga ctaggttttc cctcaaggca ctccattggt 420
 catccccgca cttcttttagc aaggggctat acta 454

<210> 4524
 <211> 445
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-040-Q1-E1-A7
 <400> 4524

ccccggccga cccacacgtc agcccacgag tccgcccacg cgtccgtgag aatcatggta 60
 gacactaagc ttaaggacgg tgctagtgtc gctctttgga cttgccgccg atttctctat 120
 acagttgtgt tagcattttc agcaacaata attggacttg atggaatgaa ggcagataac 180
 atatggaacg atgccctata ttatcatggt aaagtggatga acttttgtgc atattcggct 240
 tcgtcagttt ttgaaagtgg cgaccatggc gcatgtaaat atgtgatggc tttggcttct 300

atcagcttga ttttagattt ctttctttgg ttggcgcct ttgtcgacgc attgtatcca 360
attcttacia agttctgggt tgtggagctt ggtatcaaca ttttcttac tatgtgggtg 420
ttggttgggtg caatttagtg actgc 445

<210> 4525
<211> 223
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-040-Q1-E1-A9
<400> 4525

tacggcttac cattcacggg ccgacccacg cgtccatgcg atatacaggt gtagggtgaa 60
gtggatgcta atgttcttga atgcttgggt ttgcatcaag ttatataaga attattgcaa 120
taggtccatg aaatcgcaat actagtgggt cttttgggtt agcacatgta aaggggacag 180
gattggagca acaaaggaaa tggataaaat gcaaaattgt ctg 223

<210> 4526
<211> 300
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-040-Q1-E1-B11
<400> 4526

gcgtccaccc acacgtccga aaggagggaa tgaagggaa ttatggcaaa aacacgtgcc 60
agcagcagcg gtaaacgtg ttagcaagc gtagagcaga agaactgggt gtaaagggtcg 120
agtagtagag taagtgtaaa agggaaagga aaggagagaa agaggaaagg gatgaaatgc 180
agagatctct agagaaaggc aagaaagaaa agaaaggaag acacagtaaa tgaggcgaga 240
aagcatagga agtgaaacgg attaggaacc cgtgtagtct atgcagtaaa agaaagaata 300

<210> 4527
<211> 446
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-040-Q1-E1-B5
<400> 4527

gaatgcccg ggcgacccac gacgtcagtg tggttcgtcc tggcggttgg ttgcattggt 60
ggaaagcttc atgacttcac tacctcagtt attgacgtgg aagagagaaa agtctgtgga 120
taagaagcca agtgaacagt ctcattgcaga ccgaatggta ccagatgggt tatatgaagt 180
gagagctatt caacttcctg gaggttcgtg gagacattat tatgtagacc acgcttccaa 240
gtcgacgtat tggattcttc cgtatcttca cccggatggg ttacgtcact cgttgggaaca 300
agaagtggac tacttacctt cttatgagga atgtgtaaag gaaacaagtc ctttggcggt 360
tcctaattatt tcttcttctc gttcttcatt ggaagatgag tagtaaggga atgttggggg 420
cgtagtttat gcagatgggt tttgggt 446

<210> 4528
<211> 243
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-040-Q1-E1-B7
<400> 4528

aattcccggg ccgacccacg cgtcagcccg tgcgcaccct gactccggag tggattgaag 60
cagagcgtcg caaagagttt gcaaaggagc gagagtcggg cccgccagtg gagcttgatc 120
ctatcttgca caggcgtggc tatcaccact agatagttcg attatttcag tgatttggtg 180
gcagaacagt tggtgaggtt tgtgtgataa aataaaatgc ccaaagatgc gcttctttat 240
tct 243

<210> 4529
<211> 321
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-040-Q1-E1-C1
<400> 4529

accacgcgt ccaggttaat tcgtcgatcg catctcatcc tggcgtaggt tagcctagtt 60
gaagtataag catacaagat gagttcttgt acgtatctca aaggcatctt tacatttgta 120
atagcatatg catgcgtgga ctaatcttct tctatttcag acacggaatc atactcacta 180
tcatgataag gtgacgggtca tgtcactcct acgatatcac cacacgatgc aggataatac 240

tttaattctg acaagttaat atccagttag ataacatc aaccatgtcg atctgacact 300
cgatgtcagt tcatagatcc t 321

<210> 4530
<211> 438
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-040-Q1-E1-C6

<400> 4530

aattcncggg ccgacccacg catcagattt acgaggaact gtctcgagaa cgaaatattc 60
gacceggctt tcgttttggg ctgtttggag gtttggcaa tgcggcagta gaaacgtaca 120
tcttctgtgg aaagagtttt tggacttttc atctgcctca tcaggcaa at gagagcttaa 180
aacctgcttc ttcttgtgaa aagattagtt atccgaaacc tgatgggaag cttacttttg 240
atatcttgac atccgttgcc ttgagtggta ccaatcatga tcacgaccaa cctccgcatt 300
taaaagtcaa agaccgcaaa gtagtggaag atatcaattg gaaggatatat gcgggtccag 360
aaagtagata ctgtcctgca agagtttatg aatatgtaga agacgattcg ggacaaccaa 420
agttacaaat caatgctc 438

<210> 4531
<211> 397
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-C8

<400> 4531

gtacaagtac ggaattcccc ggccgacca cgcgtcagcg gacgcgtggg cggtcgcgtg 60
ggaatgaata aagacttgat ttggcaacgt ccaagtttct ggttcaaggt tgcaggtttt 120
agtggagcag ctgctgtagg tttgggagcc tttggtgctc atggactccg ggcacgagtc 180
acagaccctt atttgttaca aatatggaat cgtgcggcaa gttatcacca gatacatagt 240
ttagctgttt gtgctgcagc ctgttggtgca aatagcgagg gaaaacctgc tttttagtga 300
acgtcgttgt tctctcttgg aatagcgttg ttctctggtt ccctgtatgc tttgacttta 360

actgtgaacc gaaaaactgg tgcagttact ccgtttg

397

<210> 4532

<211> 400

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D10

<400> 4532

cacgcgtcca ctctacgctt gaactaaaat atccttttct atttgggtga gttcatgttc 60

aactaaggaa aagttggtat ccagataagc attcactgtg ttgagttctt cctcaatgtt 120

catggaattg tgccaaattt cagcaagttt cttgtaatct ttcgtaaact catgttgcac 180

attggtaatg atgggtctgca tatctgactc aacttgctgc atgttgcagc ttatattcaa 240

gttatacagc tgagttttta ggtccactgt attattccat atttcaacaa gtttcgtata 300

ttccaccgta aattcttgtt gcatggtgga gataattgtg gttaaacaatg ttggggccacc 360

gtagaactgt aattgatcaa tatggataga gcatttgaac 400

<210> 4533

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D11

<400> 4533

gccacgcgtc caccacgcgc tccgagaaga tatttcaaat cctgaacgag tataagcttt 60

cgttgctaca ttcataccaa gcagttgtgc agctttcata aagaaagatg ttagattact 120

tggcagctcc atctcaacgc catgagaaaa gtctccgttt ctgaaaatcc ttacttggca 180

agactcttga ctattatata aggacaactc ggaacacttg tttgataggt gggtatacat 240

cttttctttg ccagaagaat ctcccggaga agacttgtga cggaacggt gccgactagg 300

aagagattct tttggaactt ctgtggaaga ctactttgg ggaatatctt cttcccctgt 360

acaacttact accaaggaat cctcatctat catatcgaat atgctt 406

<210> 4534

<211> 448

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D2

<400> 4534

cgggccgacc cacgcgtcaa cccacgcgtc cgcccacgcg tccgcccacg cgtccgcca 60
cgcgtccgca ttcaacgaac gatgaagttc cagtacgtta gtcttttatt ggctctctta 120
tgcgtaggtt ctgctctggc tgctgaattg gcacctggaa ttgcggaaaa accggtagag 180
agaggatatg aggaaccctg ctgtaccgaa tattgttatt gggaagaaat atgtatcaca 240
cccacacca cacctacacc aacctactat tactattatt acgcaagaaa tgcaaacag 300
gaaaatgtcg agagaagcgt agaaaagagt atctcttcg cagaaaaatc tgatgcggtt 360
cgagggtatt tccccacgta ctactattat gagactcta catattatta ctattatgag 420
actccgacat attattacta ttatgaga 448

<210> 4535

<211> 344

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D3

<400> 4535

cgaagagatt tcaattcgtt tggttaagt atcgatgaat tgattgatgc ttatgttcag 60
acggtgttgg cagtagtagc tatcgataga atggcacagt ttttgaggcc taacggtgtg 120
ttcaataagc accttttaac ctcggtggac aacgatgagt atttacttga cgagattctt 180
tacgatcagg agaaccatta gtcgatga acaatgattt atgtatacag tttccatccc 240
atatgtaaat atctatttgt ggaactgaat gcggtgtag tacttacccc aataataaaa 300
ggtaatatac acagacatga agacgttgag aaacagttca aagg 344

<210> 4536

<211> 427

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-040-Q1-E1-D5

<400> 4536

acccacgcgt cagctgaagc ccagtttggc acttgatca ctatagtaat ggtactttgc 60
 tattctttgg aaactccaat cggatatctc attggtattg gtattgcaca cacttatcag 120
 gaaaactcct cggcatcttt gttaacgaga ggcattttgg atgcatctc cggtggaatt 180
 ttaatataca caggattggt ggagttgttg acttattggt ttacgcgcaa ctcgaacttt 240
 ttaagacgca aagccatata ttttttagt attgtgggat ttgtctggtt aggagccatc 300
 tgcattggca ttatcggagc gtgggcctaa gaataaaatt tgtttgagac gtcgtggtgc 360
 agatgactcg catgtgtggt agttggttca agtttgacaa gaganaacat ttgttgctac 420
 ttcttac 427

<210> 4537
 <211> 409
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-040-Q1-E1-D6
 <400> 4537

gtaccagtca ggaattcccg ggccgaccca cgcgtcagcg gacgcgtggg cttcaagttg 60
 ttgtaataaa tattcgagaa aagttgtagt cgtttgtcac gagtcagaac catctttcaa 120
 aaatatatgt tatctttttt taatattatt atgcatggt tcttgaagct ttacccgcag 180
 atgttataag gaacatatgc tgtcatttgg acggtgtatc actagctaga ctttctctgta 240
 cctgtagaaa actaagaaac gtttgcgcag atgaagctct ctggtttgct tgtctcaaaa 300
 gggaagtttt ggaagatgta aaggaagagt ttgtcctttc cttaaacaaa catgcgcaat 360
 atcaaagaag ctggtataag atctatcagt cacttcattg tgccgcacg 409

<210> 4538
 <211> 451
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-040-Q1-E1-D7
 <400> 4538

aattcccggg ccgacccacg cgtcagcttt gtcgaggag aggattcgtc ctgttctcat 60
 gtttgtggtg tggtttctg caagtttggg atggaaacaa ccagcaacaa ctactcaaag 120

aatttcaagt tatcactgga taactacaac atggatatct ttgaaaatga aacgtcattc 180
 ttctccaaac caccacaccg taaggtttcc tctccgcatg atgaactcgg agaacaagac 240
 gcgaccccggt tacttgcaag agttgccttt gattccgatac gacgaaatat actcgaaaag 300
 ttttcgttgg aatcgaattg gttgctatgc cttgtacaac ggtgaccaag cactttgtta 360
 tgtaagttac accaaaaact tgcacagaaa gattgccttt cacgccaagt tgcaaccaga 420
 gaattgcaaa tttttcacag cctttgtcgt a 451

<210> 4539
 <211> 462
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D8

<400> 4539

gtaccagtca ggaattcccg ggccgaccca cgcgtcagca tatacaagct gcaggctttc 60
 gcttcaacac cagtataatt ccattgatt tatgactttc caacagtgga tgattatttg 120
 tattgtcttg cagaaatgaa tcaaggatg aaacagtaca tgggagaacc acagagtgag 180
 gcttggcgac aactacacag ctatgtcaag gaacatagtt ctcaacagct ttccgatggt 240
 tctgtcgtaa ttcgattgaa cattatctcg attggcattg aatccgaccc agtagcataa 300
 tatacgcatg gtgtgttctg ttcgagaaaa ttggttgcta tgccttgtaac aacggtgacc 360
 aagcactttg ttatgtaagt tacaccaaga acttgacag aaagattgcc tttcacgcca 420
 agttgcaacc agacaattgc aaatttttca aagcctttgt cg 462

<210> 4540
 <211> 394
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-D9

<400> 4540

acgcgtccac ccacacgtcc gccacgcgt cgcgccacgc gtccgcttgg gcacagattg 60
 agttgcgtgc cacgaattat gaagaagctg ctgcgtctcg ctctttggtg gagccattgg 120
 aacctaccaa tgtgtatcta tggcaaacct atgctcagat agaaagtgct cagggtcatt 180

tggaacaagc ctatcattac tatttgaagg ctcttgagtt ggatcccaac aatgtagtag 240
 ttatggcatg tctggcaaaa ttggaagcga aaaagggtaa tgttgatgaa gcaaggagta 300
 tttttagaaa agctattgag ttggacgaga aagtgcccgat atatatgcat gttggggccaa 360
 cgtagaactg tgattgaaca atatggatag agca 394

<210> 4541
 <211> 372
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-040-Q1-E1-E1
 <400> 4541

cgggtctagaa aatccggggc ggcccacgcg tcaggacata ttggataggg aatgtatcga 60
 tgtatacgat gtgaacagtc taatgtatta aagtgaagg aatcacgagt aaggtctagc 120
 gcgacgtgtg ggttcttgcg atataaaaca aggattgtac agcacttgca gactgtcctc 180
 aacgcaatth gctgtgtgg tagacagtaa gttacgaaca gtatgtgacg acgaaaaaat 240
 ggtacaaaac aaggcgggtca ctctaaagga tactagctta cgtagtcgtg catacgacgg 300
 tctaaatcgt aaagattgac acgtagatac atttcaatag ctgtcatatg agtacattat 360
 gactggaaaa ac 372

<210> 4542
 <211> 411
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-040-Q1-E1-E10
 <400> 4542

cgggccgacc cagcgtcca cccaagcgtc cgcggacgcg tgggcgcaat gacggttagg 60
 ctttcatctt ttcggttttt cttctttggt ttttactgct ataacgcggt gctcaagaaa 120
 cttagagtga atccgaacca aacgagcgag gttttgctgt gacagagcga taaggaagtt 180
 gaagtggaca gacgtctttt gttcttttca ctgcccaaca agtgcaaaag agatccgctc 240
 ctgccatagg acaaaacaac tagtcaactga gtacaacgtg cgtcggcgca gggcattcta 300
 gcagcactat actattcatg agctagtaca agactacgcc ataacagcct cgttcgcaga 360

atagtagaat ttttctgcaa acaagctttg gggacagagg agacaacaga g 411

<210> 4543
 <211> 439
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-040-Q1-E1-E2
 <400> 4543

gggccgaccc acgcgtccac tcattgttgt gtcgtgcatg ttaaaggaat aagtagttat 60
 tattgatatg gaggctgcgt taagtgcagt tagtgaaaag tgtgggacag agtttaaaaa 120
 ctttcagcac tgtgtagcac caaatagaga taactgggag gaagtttgta gacctcagaa 180
 agcagacttt gccaaatgta cttctgaaaa tatgcagttt atggacttgg tacgagaggg 240
 ttgtttcttg gaaattcgtc aatatgaaag atgcctcaag gaaaacagga cagaaccaac 300
 cctgtgtgag gaaaaacgaa aacaagtctt ggactgtggc gacactgtta ttcgcaacaa 360
 ccaagaagac tcggaaaaca ctccatagaa aactatctat tatgcaacaa cagtgtgtta 420
 ttccatanag aaacgaaca 439

<210> 4544
 <211> 462
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-040-Q1-E1-E6
 <400> 4544

ggtaccagtc aggaattccc gggccgaccc acgcgtcagc ccacgcgtcc ggtagatat 60
 tgtgaaagat gggagtcaaa gttggtatta atggggttgg gagaattgga aggctagttc 120
 ttagagctgc tttggagaaa cagtctgtag atgtggtagc tatcaacgat ccctttattg 180
 atttggaacta tatgggtctac atgttcaa atgactctgt gcacggcgct tatccaggta 240
 cagtggtagc aaagaatgga aaacttgctg tggatggaca cgaaatggca gtgtttgcct 300
 tccgtgaccc tagtgagatc ccttggtcct ctactggagc agaatatatt gtggaatcaa 360
 caggagtatt tactgctgca gataaagctc gagcacatat gaagggaagt gctaagaaag 420

taatcatttc tgctccggtc aacgacgctc ccatgtttgt ga

462

<210> 4545
<211> 392
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-E7

<400> 4545

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gtcagcatta gtggtaacga gttggttaga atgagtaggc tcatgcgtag gaatactttg 120
tggaagttag ctgtatgtat atgcaactga caccaatctc gttaatgatt tagtcgagaa 180
cgacaacatg gtcatgcgtt aacactggcc ataggactga tcgaattgca gttgaatcat 240
ttgatactgt ttttatcgta gatgagaacc aagtggtagt gtatgccttc cgtagaccta 300
ctatgattcc ttagacatct gatggaacta attaaagtgt taaatcgagt agtatagtta 360
cagctgcaag taagactcga gcatataatg aa 392

<210> 4546
<211> 365
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-E8

<400> 4546

aattccccggg ccgacccacg cgtcaggaag aagaagccat ccaaattgcc aacgatactt 60
cgtatggttt aggtgctggt ctgtggactc gagatattat gaaagcttat cgcgtatctc 120
gagcaatcaa ggctggctgt gtttgggtta actgctatca tgagtatcct tctcatgcgg 180
cgtttgggtg ttataagaag tcagggtttg gtcgtgaatg ccacaagttg actttggagc 240
actatcaaca attgaagaac attatcatca gttactcacc acaaccact ggtctgtttt 300
aagtttgaga ttggagggtt tgttgtttgt ttgtgtgagt gttataaaga atcatgtgtt 360
ggtgt 365

<210> 4547
<211> 400
<212> DNA

<213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-040-Q1-E1-F2

<400> 4547

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 ttccaccgac ttggaaattt ctgctcaagc agttgggaat acgtttgaag gttggggaac 120
 gtcccttgca tggtttgcca atgtagttgg taagggacct acagaacgca aggagcgaat 180
 ggcagacctt ctttttgacg aacaacaggg cctacgtttg aatattgttc gttacaatat 240
 tgggtggtgga gagaatccaa atattcccgt tacactcgaa cctagagctt gtatccctgg 300
 tctttatact agtgcccatc aagttaattc tctttcactg gaacaagata gcggccagtt 360
 gtggttttta catgcagcgg tganaagagg agttgacaag 400

<210> 4548
 <211> 441
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-040-Q1-E1-F4

<400> 4548

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 cagagatcct tgaaaaagtc gtctgaatcg ttttgtaaac agtgttggtt ccaacaaaga 120
 agtcttctat cgacaaagaa gtttcgtcaa ctacgagttc gaatatgtgt tacgaataacc 180
 ctcttctgta gtttctcaga agcaccagtt gacgagatag atgaaacaat taaagaagct 240
 caaggtagtg aacttttcgag agctgattcc gacttggtta agtttgcctt gatgggaaat 300
 attgtgggag tacaacaagc acttgacgct ggcgcgaaag ctggagttca agacaaggaa 360
 tgacgaactg cgttacactt ggctgccgct attggtgttc atccttangt gaaataatat 420
 tacaagctgc tggagatctc g 441

<210> 4549
 <211> 247
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-F6

<400> 4549

aatgccccggg ctgacccacg cgtcagcgtg gcagccggaa gctttgtgat atgggtgggtca 60
ttccttgcct tgtttatatt caaaaacaga tcgctattaa actatttgaa caatttgtac 120
aagaagaaga ggaaagatat caactcaata aagtagtatg gcacttgtat cattcctaaa 180
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggag 240
gaagcac 247

<210> 4550

<211> 375

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-F7

<400> 4550

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gaagccatcc gtgcggtcaa ccaagctatc ggtcgagtga tacgacatga gaaagatttt 120
ggtgcgatta ttctttgtga tgaacgtttt tgtagtatgt ctcaccaact ttctcgttgg 180
atacagccat ttgtacgtca ttattctttt ggacagttgc aatccaactt gcatcagttt 240
tttaagcgtc gagtatctgg tggaagaag agaagtgaac aaggagaggt gttgtcttca 300
tcctctcaa agaaaactcc caagttgagt gcgggagatg aagcatattt atttcaagcc 360
atgggaatgg agcct 375

<210> 4551

<211> 362

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-F8

<400> 4551

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gcaatatcga tatgtcaagt ggctggaata actatagtgg aacggcaggc aatgggaatg 120
ctgggtgctgg tcaagggaag aacacggata agaagaccag tggagaactt gcaaaaagata 180

gtttaaacgg gttgggaatg gcagccttgt cagcgggtaa gctgggtttat cgcggtggca 240
 agtgggtgtgt ggataaagtg gaaggcgcca ttgacgacca caagtcaata ggaagtaaga 300
 gtggctgtgg tggaaattca cgttattctc gttgaaacgt aataacgtgg atagaaacag 360
 aa 362

<210> 4552
 <211> 405
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-040-Q1-E1-F9
 <400> 4552

acgcgtccac tttaggatcg gcaacgcaat tccgagaaag aaaaattggt gaggcacacg 60
 agtgtcgttg ctagtgttat aggatggtag tttatcgaaa gggactagta aatatgttac 120
 aaaagtcttt aaaagagttt aaagatgctg ttcgtcagga gaaaatcaaa gaggactttt 180
 ctaaaagcga atatcacgtt acaaagggag agaagattcg tgccaataga cttcaagcac 240
 aatatgcaag aaaggcaacg aagacttggg atatgatcaa tacgctgttg gaaagacagt 300
 cgagaggatt ctaattggat atttgtatgt ggaggagcta aggaagaagg tgataggaca 360
 agggttgtat atctatggtg atagttgtgg tatctagttg tgatg 405

<210> 4553
 <211> 385
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-040-Q1-E1-G11
 <400> 4553

acgcgtccag acaaatggcc aacgctggtc aagatggcct tgtgcaagtc aacaaacata 60
 gagaagtaaa gagattgcaa gaagataata ttttgaatag agcactatca caaccaggag 120
 atgtatttct gtgcttttgc aacatccagt tgttggtgaa tgcagaaaga gctattatag 180
 gaaatattac ttgtccagaa agtatcgaat tgtgtcgtct attagctgga catatagcgg 240
 tttggttcga tgaacatttg gatgactttc gtttggaagc tatcttggga gcactagtgt 300
 gtacttgta ctgtgagtgg aagcgttttg aaggagaatt gggggtacaa gaatggaatg 360

aattggacaa gatattctcc ctaga

385

<210> 4554
<211> 83
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-G2

<400> 4554

cgggtcaagta tccggggccga cccacgcgtc aaagaatata ctccgggtgg gtgaaaagtt 60
ggcgggtgggt ggacttaatac aat 83

<210> 4555
<211> 440
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-G3

<400> 4555

gggccgaccc acgcgtcaga aaagttcaaa tattcattgt gtacctgaca gtagaactgc 60
attgaatgga gaaaaggatt gtagacgtgc cttttgacac atgatataga atgactgctg 120
ctgccgtatt cactgcttct tgagctttcc aatgtcactt ggctccacaa tcctagatag 180
gattctttga caagatatgt agggatatcca ttctctcctt atccatcctc ttctgataa 240
tggtcaccca aaggttgctt tcaaccaagt actctgtgag aacaattccg aagtgttttt 300
ttaagaagaa aatttggtga ggccggcctga aagctttgac tcggctctgg gtcgatacag 360
aaagcatggc aaaattttta ggatgaagaa caaaagcaag gatcgagacg aggatctatt 420
gtcatcaatg caaaacacga 440

<210> 4556
<211> 258
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-G6

<400> 4556

gtacaagtaa agaatgcccg ggccgaccca cgcgtcagcc cagcgtccg cccacgcgtc 60

cgcccacgcg tccgagggct tagggtggat accttggcat ccagaagcga tgaagggcgt 120
 ggctaccaac gaaatgcttc gaggagctgg aagcaagctt tgatccggag gtacccgaat 180
 gaggcaactc tttatactgt ctactgaata tataggtaga taagagcgaa cttagtgaac 240
 tgaaacatct tagtaact 258

<210> 4557
 <211> 445
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-040-Q1-E1-G7
 <400> 4557

aattcccggg ccgaccacg cgtcagccca cgcgccgca cggacgtatt ctaaaggatg 60
 atgttgtaga atatttgagc agcacaggaa cgacgagcaa gaagcaacag cagcagcaac 120
 aacaacaaac agaacagcaa aagccgaaaa gtatcgccga ccagtcttct tcagttactc 180
 caagtgagga tagcgcaact catagaacat atgaagatat tccattgaat aacatgcgca 240
 aagttattgc tcgtcgattg acagagtcca agtctcaagt acctcatgaa tattgtcaaa 300
 ttcaatgtca actcgataag gtattagagt tgcggaatat ttggaagaag gaaaggaatg 360
 tgtctatttc cgtaaagat tttgttattc gagctactgc agttgcattg agacgagtac 420
 cagagttgaa tatcgtttgg gatga 445

<210> 4558
 <211> 392
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-040-Q1-E1-G8
 <400> 4558

aattcccggg ccgaccacg cgtcagcgaa acaagttgaa tcggaagcta ttttaagaga 60
 actgctcgta tgtctcattc aacgtatgaa aggttcaaag gatatcaact tgctcttggc 120
 ttttacagaa atgctcgtag aagcttcggt tcataagagc accattgggc atatcgctaa 180
 tcaacgtctg atgttctacc tgatacatcc ttttgcaaaa gtgcgacaac ttgtttccga 240
 cagactacaa gttcaactgc ttacctatga agactacttt gtagaactaa tgggtgagga 300

aaactatcaa caagcgatac aaatttttga acaagtagaa tgggataaga cctccccata 360
gaaactaaca taacatagga atcgactttg ta 392

<210> 4559
<211> 444
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-040-Q1-E1-H1

<400> 4559

cgggccgacc cacgcgtcca gccacgcgtc aggtttaccc atcaatcttc tcagctctca 60
tatggatgtg gtccctgtag agactctaag ttggtcaatg gatgcatttg ctgggatagt 120
ggaaaacggt acaatgtatg gaagacgtae tcaggatatg acgagtgtta ccattcaata 180
ttttcaagca cttggaaacc tattacagcg tggatggaag ccagatcgaa ctatttttgt 240
ttccgtagtg cccgatgaag agattggagg gacgcaagga atgggagtgt ttgtagagtc 300
ggaagaattc cagaaatgga atattggttt tgaattggat gaatgattgg ccaatcctga 360
ctcttttatg tggttgtatt atggtgagcg acagccttgg tggtagtta ttggagctat 420
cgatcagcct gcacatggag caac 444

<210> 4560
<211> 375
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-040-Q1-E1-H10

<400> 4560

gcgtcaatta cgaccgcta ttcccgatcg tggttttgcc acttccatac atttggggag 60
cagggagacg cacggtcgag ttgatgacga tcgaaagcca caaatggaag cggcaattgt 120
acgtattatg aaggccagaa agtattttga ccacaacaat ttggtgtccg aagtgattag 180
ccaactacaa tctcatttcg tgccggaacc tgcagaaatt aagcgaagga tcgagagttt 240
gatcgaacgc gagtttttag aaagagataa taaccaaaaa agttatcggt atattgcgta 300
agaagctatt tgtgtgtctt gtaggctgca caggtagaag ataaaggaga gcatgttttt 360
tttacaaacc aaann 375

<210> 4561
 <211> 433
 <212> DNA
 <213> Cyanidium caldarium

 <223> unsure at all n locations
 <223> Clone ID: LIB190-040-Q1-E1-H2

 <400> 4561

cccacgcgtc agaccactcc aagaangtgt tgcacggctg tcgaaagaac gtgctgtgaa 60
 gtgagagaac gtacgagaaa gccaaagtga gaaaagaagg caagtagagg gcggcccgag 120
 aaaggagagg gcgtaagacg tgatacagag taagaagaaa agagaagaga gctagaaaagg 180
 aggtaaaaga agagtaaaag gactagaaga ggtacggaat tcacgaagaa ggagcgtgaa 240
 ggaaggagga atcccaagta atcgaggaag aaaaagcttc ggtgaaagcg tgaacggatt 300
 ttgtacacac tgcccgtcaa gttctggaag tgtgctaaga ataagcaaga gaagtagaag 360
 agagtaagaa aagaagaaag gaagtgaaga cgtaaaacgt gtgtagcaag cgtagagcag 420
 aagaactggg tgt 433

<210> 4562
 <211> 287
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-040-Q1-E1-H6

 <400> 4562

acccacgagt cagaacacat gcaagtaggt aaagcgaacg ggtgagtaaa gaggtgtgaa 60
 agagtggaag aacataaaaag gactagaaga ggtacggaat tcacgaggaa ggagcgtgaa 120
 ggaaggagga atcccaagta atcgaggaag aaaaagcttc ggtgaaagcg tgaacggatt 180
 ttgtacacac tgcccgtcaa gttctggaag tgtgctagga ataagcagga gaagtagaag 240
 agagtaggac aagaagaaag gaagtgaaga cgtaagacgt gaaacac 287

<210> 4563
 <211> 372
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-A10

<400> 4563

attcgagctt tgcgagatgc gttggtagtc attccatata ctttggccga gaacgctggc 60
ttaccatcca tagaaatcgt tacggaactg agaaacaaac acgtacaagg agataagaat 120
gcaggaatca atttcaaaaa gggatgcata agtaatatgg ctgaggaaaa tgttggttatg 180
cctttgcttg tgacagtttag tgctttgagg cttgcaacgg aatgcgtccg aatgattctg 240
aagatcgatg atattgtgat gactcgctag aaaagtcctt ggtgctatct ggaaaataaa 300
aaggttcata ataaacaaaa ctaatgataa ctggtaatcc tcaaaaagct atataaataa 360
cgtatgcagg aa 372

<210> 4564

<211> 385

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-A6

<400> 4564

cgggtcgacc cacacgtcca cccacgcgtc ggtgcagatg cagctgtcaa acataccgtc 60
aaagccgatg ttggaaggat tgtcggtagt acaccatgag ctcccagga agagatagct 120
cgagtgaaga cacctttgcg cgatagcaca ctatctcgcg tacctggaga cactggacca 180
aggattttga agcctggcgg ctgtaacatt aggaataagc cagggatat tcaatcaccg 240
ggttagaatg gtgacgcaca tgtgcagtgc ggacgtacat atgaagctgt gactcacact 300
acgtcacatg aacttggcca gaggaatggt accgcagtaa gtgatgctac atatgagtcg 360
acttcataa tggacagttt tgaga 385

<210> 4565

<211> 442

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-B2

<400> 4565

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tttctagagt gtgttttttg gagttgttgt actccagtct tgggtggttg tgaaaggctc 120
 tagtgacaaa gaggggttgtt actttcccgc cattctccac agtccaacc atcaacttgt 180
 atacggacac atatacataa ctatgttcgt acatagtcgt ggtgtaaaaa gcgacaattc 240
 gaatggttgc aaaggcttga tgaaaagcaa aggaccagtg aagggtgtag agaaagcact 300
 tgaaaaaggg ggacacttcc gtgtatatatt gtgcccctag taactaacta attcctcttg 360
 aagatattgc aagtttgggtg tactaaacac gaattgcaag tgtagtata agagagtgtg 420
 tacgtgtgtg tactgtgttt tt 442

<210> 4566
 <211> 448
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-041-Q1-E1-B6
 <400> 4566

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 caaaaacaca gcactctgca gaaaagagaa aatgtaaagt atagagtgtg cggcctgcca 120
 aatagtagag aagaaatcga tgaaagtga agcgagtaca agatgaggta tagagaatgg 180
 cggtcctaac tgtaaggatc caaaggtagc gaagtaaata gacgtttgaa aggcgtccag 240
 tatgaaagga gaaacgagtg tagcactgtc tagtcgtcca actcagcgaa acagcaataa 300
 ctgtgaaaat gcagtaaact agcagtagga cggaaagacc ccataattct tgactagata 360
 ggtttaggga ggagagagaa tcatgaagta gaggaggtgg ggtaagagat gaaagaccac 420
 tgcatgagga taaagaatct aactgagt 448

<210> 4567
 <211> 239
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-041-Q1-E1-B8
 <400> 4567

gacccaaacg tccacccacg cgtccgcca cgcgtccgat cattttcaac aataataata 60
 ataatagtat aataataata aaaccaatcc ctttgacaac aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaacaaaa ataaaaagac aaaaaaaaac aaacacaggt gcaaacaaaa agaaaaacc 239

<210> 4568
 <211> 422
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-041-Q1-E1-C1
 <400> 4568

gtcgaccgac gcgtcgacc acgaatccgc ccacgcgtcc gtcattgtg gtttctgcca 60
 tggcgaaagg tatactacag gatcgtcttg agaagcttct gccttataat cagacctggt 120
 atttttatat aaccaagata gtattttacg tatgcacttt tattttctct gtcgtcattg 180
 ctgctctggg cagtaacgca gagtttaata tatttgataa atccccaccg aatattcatg 240
 gagacttttg tgcatacaag gcgtcactag ctgagccagc tggcgtgact gccatttgca 300
 agtacctcat agcagtaggt gctcttgccc ttgtgtttgc tataaggttt gttgcattct 360
 ctctatggac ccttttggca catcgagtga ttgacttatg gtgggtcgaa gccttggtga 420
 at 422

<210> 4569
 <211> 454
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-041-Q1-E1-C2
 <400> 4569

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 ccaacaaatg ttgcaaaata tgttttcaga tccttcact gtagaatctg ttcttatgag 120
 taatccccag ttgagacaaa tgggtggaatc caatcctcag atgatgaata tgttgaggaa 180
 tccagacttt ttaagaacca tgtcgaatcc tcagtttttg aggactatgt ttcagttaca 240
 acaagccttt cagtcgagca acccaactag tacttcctcc tcctcttacc catccagtaa 300
 taataataat aataatacga atacttttcc atccaattca tctggtgcta attatatgcc 360
 agatatgagt gcattgtttt ctcttttagg tgccaacaac aacaataccg catcctttgt 420

agattcagct attgcaata tgactcaaga acag 454

<210> 4570
<211> 438
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-C4

<400> 4570

ggtcgacgac gcgtccggaa ataacagaaa aacttgtctt atggcaacat cggggtgttt 60
tgtgcgccaa taacagcgtt gagtgcgcgc aacacgtaat gccgatgtcc gaatcactca 120
attgcatagt tgcgtgaaca aagtgaagat ttcatgcgaa ggaggacagg ctttagttac 180
ttattctgta ccaaaaaagc atggatagaa ctagagcctg gaattcgtat tggactgcat 240
gcattaacaa aatttccaat ctaatgaaga gatgttcccg ttgtgtatcc aatctagaga 300
gtaagggctt cgctctatac caaaacatgg atatctttag agtctggagt ttgccgtttg 360
ctagttaaga gtcctctctg tgattcctga cgctgatgcc gtcctcctgt atctctcttg 420
agggatggtg caaaagac 438

<210> 4571
<211> 445
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-C5

<400> 4571

ttcccgggtc gaccaagcg tccagaaaaa ggtaagaaag aaggaaaagg aaaaaaaaaa 60
agggaagggt aaaaacaaca aaccaaaaaa ggaaaccttt aagcaataaa gaaaagaaat 120
cccaaaaaga aaaaaaaaaaagg ggtaaaaaga aggaccaatc aagggttaaaa ggtaaagaac 180
aagaagaaaa aaaaaaattc cgggttgaat taccaaacca gaaaaaggaa attaaaaggt 240
agaaagaagg aaagggttaac aaaaaaagga attaaaagaa gaaaatttta aggcgggcttc 300
atattaaaat tccaaaagga ttaaagaaaa gagaaaagag aaaggaaaga agaaaaaac 360
ccttctggag aacgacaaaa gttatccaag aaaaaaggaa acccaattta aggtaaaaaa 420
ttggccaata aggacttagg caaaa 445

<210> 4572
 <211> 418
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-041-Q1-E1-C6

 <400> 4572

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 gatgtaggtc tgataggctt agctgtgatg ggacaaaact tggtagtgaa tatgaacgac 120
 catggattta aagtagcggg ttttaacaga actgtctcaa aagtagacga ctttcttaac 180
 ggagaagcca agaataccaa catagtgggg gcgcactcgt tgcaagagtt ttgtggtcctt 240
 ttgaagaaac ccagaatcat tattcttctt gtcaaggcgg gtgaagcagt agatcagttt 300
 atttctatgc tcgtgccact tttgtctagt ggtgatctca tagttgatgg gggaaactct 360
 cactttctgg acaccagacg aagaacgaaa gaacttgaag cttaaaggact gcttttta 418

<210> 4573
 <211> 446
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-041-Q1-E1-C7

 <400> 4573

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 gacttggatg aaaacttata tctttgttcc gtcttgttct tgtctttcta caaaacttgc 120
 aagtggaaaa caagtagcag ttgattcaag ttggaaaaga tgtggacagt tcaagggaaa 180
 tcgttccttc ctccatgctg ctctggcac tcttaacaaa gcaagggtcca ggttttctgt 240
 ttccatgaaa accgaagctt gggtaaagtt gataaaaact gagcaactaa agccgggaga 300
 cttgaaacct ttttctgttg ctggccagtc tttgctagta gtatgtgact atgacgggtca 360
 agtatactgt tctgccaacg tttgtccaca cttgggaaca ccattggatt aaggaacggt 420
 atctagtggg aacttgatat gtgccc 446

<210> 4574
 <211> 291
 <212> DNA

<213> Cyanidium caldarium
 <223> Clone ID: LIB190-041-Q1-E1-C8
 <400> 4574
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 agaaagattc ttcaaagaaa gaagccacaa gtaaacctgc agcagcagat gctacaaaga 120
 cgacagaaaa gtctgggtccg gaagccaagt tgaagggaac tgggtgcaaag aaacaataaa 180
 aagttgacta tgcattgttc tggtatgttt tgtgagttct gtttgatagt ttccagctat 240
 tcttttggta gtgaataaag agaaaatttt ttatatattaa aaaaaaaaaa a 291

<210> 4575
 <211> 134
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-041-Q1-E1-D1
 <400> 4575

cgctccgctcg acaaccacca atactactag caacgaaaag aaggataaat tgagaattag 60
 ttttcacgag tttcaggtac taaccaatcg aatagctcta ttcttaagac gaaacgatgc 120
 agaaggagtt gctg 134

<210> 4576
 <211> 255
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-041-Q1-E1-D11
 <400> 4576

aaggaggatc caccctaacg tatccatgca tactacgtca taactcttct aaagtgtcac 60
 ccaaattcaa ttcacaaggt cgacttatta gaccttcgtt actgaaaaaa ccctggggta 120
 aaccacctta atcacctagc ataacatccc cctttcacaa cccgttttaa caaccaggag 180
 gaccacacaa atggcccttc ccaatagttg ttcaaacaaa ttggcaaattg gaaagcgcca 240
 tgtaaccgcc catta 255

<210> 4577

<211> 455
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-041-Q1-E1-D5

 <400> 4577

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ccgggtcgac ccaagcgtcc acggacgcgt gggcggacgc gtgggggtcga gagggaaaaa   60
gccagaagc caagataagg tatcaaagta aagaaagaag gaaaaggaga agaagagagg   120
gtaggcttag aagcagcaaa ccagagagga aagcgttaaa gcatgaaaga aaagaaatcc   180
gaaaaagaag agaaaaaggt aagaaagagg accgaatcag ggtaagaggt agaggagcaa   240
gaagagaaga gagaatgctg ggtggagtag cgaaacaaga gaaggaagt aaaaggtaag   300
aaagaggaca ggtttacgag agaaggaagt agaaagaaga gagtgttaagg cggcgtcata   360
atagaaatcc gaaaggagta gaagaaaaga gagagaagaa agaaaagaag agaaaagccg   420
tactgaagac caacagtaaa caattggttt tacac                                     455
  
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<210> 4578
 <211> 459
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-041-Q1-E1-D6

 <400> 4578

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attcccgggt cgaccaagc gtccagtgtt ttggattgcc cttgtcgtct atcatagaca   60
cacgttaacc ttggtccatt actactagga atgacccttc gtaaaccagt ctttaccaaa   120
gtagaaaaac tacaaccggg gacacagggg cacaacttga tcgttcaagt gatgaacgtc   180
ggtgaggtta tggaaaaagt gagaccgagt ggtgacaaac tgcaaatcgc cgaagtgtcta   240
cttgcagatg aaactggagc ggtattatth acagcaagga acgaacaaat caaacttttt   300
aaaaagggag agtgtgtgac cgttcgaaac gcaaaagtca atatggtgcg aggctttatt   360
cgtttagtag ttgacaaatg gggagctatt aagccgcctg gaccaacgga aaagttacaa   420
tggacaccaa aagttgaaaa caatattttc aacatagaa                                     459
  
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<210> 4579
 <211> 215
 <212> DNA

<213> Cyanidium caldarium
 <223> Clone ID: LIB190-041-Q1-E1-E11
 <400> 4579
 acgcgtccga ccacgcgtcc gagcattttc agcaacaata attggacttg atggaaggaa 60
 ggagataac atatggaacg atgccctata ttatcatgga aaagtgggtga acttttgtgc 120
 atattcggct tcgtctgttt ttgaaagtgg cgaacatggc gcatgttaat atgttatggc 180
 ttgggttct aacaacttga ttttagtttt ccttc 215

<210> 4580
 <211> 343
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-E2
 <400> 4580
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 tctaggtgca gctgttgttt tgtatgggtt gcaacacgat aaattgccac tagagagagt 120
 ccagtttgca aaaacctttt caaagcccgt ttcaaaagca gataatcaag ttgttcgagc 180
 aacaccggaa gaatgcgatt gtcttccgct ttggcagtgt atgactagtg gccaagacga 240
 ctgttctcaa cttgaacgtg aactgaggct ctgtatggaa cgaaacaaga agcgttctgc 300
 tcaagtgtag ataagtgtt tcaataaata caagttgttt tct 343

<210> 4581
 <211> 330
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-E3
 <400> 4581
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 cttggttagca gttgtacatt caacatcatc aaatgccaaa aggaagaaag aaagattctt 120
 caaagaaaga agccacaagt aaacctgcag cagcagatgc tacaaagacg acagaaaagt 180
 ctggtccgga agccaagttg aagggaactg gtgcaaagaa acaataaaaa gttgactatg 240

catgtgcagt cctgttatgt tttgtgagtt ctgtttgata gtttccagct attcttttgg 300
tagtgaataa agagaaaatt ttttatattt 330

<210> 4582
<211> 433
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-041-Q1-E1-E6
<400> 4582

ccgggtcgac ccaagcgtcc acccaccgct ccgaaccaat aaatcaatgt cgtcttggtg 60
aaagccttcc acgccaatgg aatattaaaa gtggcgactt tatcaaggga acatcaaaca 120
acagcaacaa caacaacatc aacattcgct accacaacta gagaataata aaccaagtca 180
actgggtagt atttcggtat aaacgagaga aaatattatt cccacgggca accttgctct 240
agactggaca acactttcgg acaacttgtc attgttgtct catcaccctt caaaaactac 300
gagtaattaa acaacagagg aacagacggt tgatattgga agatcaaacc aacatcaaca 360
tcaacaaccg tataccacac cgatggaaca ttgactgtg ccactagaca ttactttgaa 420
aaacgccatc aag 433

<210> 4583
<211> 257
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-041-Q1-E1-E7
<400> 4583

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cgtgctggta aagtacgagg tcaaacacaa aaggttccga aacaagaaaa gaagaagcgt 120
ccaaagggga gggcttgga aagactcaag tacaataggc gttttgtgag tgttgttggt 180
ggttttggta agagaagagg tcccaacgcc aactcgtgaa gcgactgcaa tgataaagac 240
aatactttac agcgttt 257

<210> 4584
<211> 433
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-F11

<400> 4584

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ggaagtaaaa ggtaagaaag aggaaaggtt tacgagagaa tgaagtagaa agaagagagt 120
gtaaggcggc gtcataatag aaatccgaaa ggagtagaag aaaagagaga gaagaaagaa 180
aagaagagaa aagccgtact gaagaccgac acaggtactc gaggagaaag gagacccaaa 240
ttaaggtgag agaatggacg ataaggaact aagcaaaagg atatggtatc tgcggtagaa 300
catatgaaag aagcagcacc gactgttttag caaaaacaca gcactctgca gaaaagagaa 360
aatgtaaagt atacagtgtg cggcctgcca aatagtagag aagaaatcga tgaaagtgaa 420
agcgagtaaa aga 433

<210> 4585

<211> 459

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations

<223> Clone ID: LIB190-041-Q1-E1-F2

<400> 4585

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tagaggacaa catgacgagg acgcctcggc attcatataa ataaactatt tctgcaccaa 120
aagaatagtt aaggatctan gccacaaatt aacagggtaa gggatatgtgc agaaccgttc 180
aagtgcgaat tcgaggcttt agggctatcc ttattttggg tagagcttgg ttctcgctcc 240
acatcaaaat tccaaacgat agtaaaaaca aatagtttgg catccgcttg aatctttcaa 300
taccctatc ttatcattgt aatgaaggat tttgagttgt tttactgggg tggaagatca 360
gaaggaagaa tggtttctac gacagaagaa tatcgcatgg attaaactaca agtgaagatg 420
attgggaact cttttgaaac gctatgacag angatatac 459

<210> 4586

<211> 427

<212> DNA

<213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-041-Q1-E1-F3

<400> 4586

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gttccggtga atgacgggga agctggagaa tgcaaatttt taagcgttca ttcgacgttt 120
aagacgagat aaaggtctan gtcctaaat gtggcatata gaggtaagtg cagaattggg 180
atactgcgta cctgagaca gtggaggaag ctggagtatc tggaaagatt cgttgcaact 240
tgggcaagtg gataagctcg aatgatcaaa cattgattat gtacttgcta ttagtagatc 300
aagaactgac acagaatgat accatatggg aagagaggaa tgagcgacct cggagatggg 360
taacgtgtga cgaagcatcg aagactatct tgcactctga gagtggtatt cgaatgcctg 420
agctatt 427
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<210> 4587
 <211> 305
 <212> DNA
 <213> Cyanidium caldarium

<223> unsure at all n locations
 <223> Clone ID: LIB190-041-Q1-E1-F4

<400> 4587

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gtccgatcac gcaatccgac ggacgcgatg gggatatatc atataaaaac gggtaatttg 60
acagaanatg agagaatgga aagttttaat ggttcattcg aagtttaaac cggaaatatg 120
gttgggtccc aaacgtaaca tggcgggctg acaaaaggat taagacttat gtctgccgtc 180
atgcaatgtg agaacccttc ttaactgtca ccaattttta tttcactgtg cacttgtttt 240
aaaacgtcgt gattgggaaa aacctagggt ttgccaaata atacccttg aactgaatgc 300
ccctt 305
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<210> 4588
 <211> 428
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-F5

<400> 4588

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 tgggatgctg cctgccgtga aacagtggag gaagctgggg tatctggaaa gattctttgc 120
 aagttgggca agtggaaagg ctogaatgat caaaagttga tcatgtactt gctattagta 180
 gaacaagaac tgacaaagaa tgacaccaga tggaaagaga ggaatgagcg acctcggaga 240
 tggttaacgt ttgacgaagc agagaagact attttgcaag tggagagtgg tattcgaagg 300
 cctgagctat tagaaatgct tttattagcg aaagcaagaa tattgacttt ggacactact 360
 ccagagtctt attccacaga ctcttctcct gaagaggaga ataacgaaaa ggaattttta 420
 cgtgttgt 428

<210> 4589
 <211> 453
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-041-Q1-E1-F6
 <400> 4589

ccgggtcgac ccaagcgtcc aataatattt gcactttttt ggacttttga tttgcacgtg 60
 tgggtgtgct cagtcagaac tgcttctcag ttagttacgc aatatgccta gtcataagga 120
 acaaagtaca ggaattaaaa tatcagctga cggttacgca ctaaagttga gcggtattcg 180
 gttggacgta gacggcagtt tggctactat ggtggacgca gacgacctca gagccctcat 240
 gtttacggaa agcctcaagg aaaagtcaaa gctgcatgac ccaaaatttt tcaaaagcta 300
 ttatgaggag aataaggact acttttatta tatgactcat acggagaaga aaatgtatct 360
 ttctctggaa gttgcacgag aatacgctac tctgggtggga aactcgtttc tgcagaaata 420
 tttggacaaa gtcattgagc acgaacacgc ata 453

<210> 4590
 <211> 429
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-041-Q1-E1-F7
 <400> 4590

tcccgggtcg acccacaacg tccaccacg cgtccgggcg tttggctatt tgttacacac 60

acacacacat atatatatat atatatatat cgttattgcc atcttgctgc cgatggcttc 120
tcgtcgagat tggaaagata tagctggagc cggttcttct tgtttcttgt ccttttttagc 180
acgtatttta ctattttctg ttgcccagtt gggttgggag ttttttcggt caacgccttg 240
gagaacaata ttggaaggac cgtttgtgtg tcttttcaat tcattcggtt tggttggctt 300
tggaaacttg gaaaattggt tggttttcaa acaaataccg gtttatccaa aattggtaaa 360
atttttggaa ccaattttgg gtttgggaact tacaatacac ccgttttttc caacaacttg 420
ttggttaatt 429

<210> 4591
<211> 446
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-041-Q1-E1-F8
<400> 4591

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ctcttgagga gtccgaattg cgttggcagt gaaaaatatc gactatgaat acaaggctat 120
caacttggtg aagaacggag gtgagcagtg gggatcggag tatgagagac tcaaccaag 180
tcacactgtg ccgacgttgg tcgtggacgg tcatactatt ggtcagtcag ttgccattat 240
ggagtacttg gaagagaccc ggccacaagt gcccttggtt ccaaaggacc cggctcagcg 300
agcaaaagtt cgtcaggtag tagaaacagt aaatgcggat acacaaccac tgcaaaat 360
gagggttctg cagtgggtac agaaggaggc angggaggaa aagagaaacg cgtgggtaca 420
acattttctg acgtcaata tacaag 446

<210> 4592
<211> 423
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-041-Q1-E1-F9
<400> 4592

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cttccgcttg gatgctactt cagttggaga tgaacgtgga tttgcaccca acattcatga 120
 attggaggaa ggagtggagt tgttggtaga agccattgag aaggcatgac atactggtaa 180
 agttaagatt ggcacgact ctgctgcttc agagtttttg aagtctgagc gttccagtta 240
 cgatttggac tttaagaatc ctagttcttc agatgctcat ctcaagtcca ctgaacaatt 300
 attgaattta tatgaagact tggcaaagaa gtttcttatt gtttcctttg aagatccttt 360
 ccatgaagaa gactttgatg gctttgcaaa gatgacaaaa gtgttgggaa aggactatca 420
 aat 423

<210> 4593
 <211> 448
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-041-Q1-E1-G1
 <400> 4593

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 cgtccgcccc cgcgtccggt cacctttttt aataaaactt gcatgggtca aacttcacta 120
 ngaggagcac aaacttgatc tacgacagat tcattctaat ctacagaaaa tatgtcgtcc 180
 aagtgaaggc ttttcccatt cctttccact tgagcgtttt ctttatctga ctgagagttc 240
 ccagcanatg attttgaaaa ggataaagtt gtggacaacg gaacaaccgt ctttgtatct 300
 gccgcccgtc ctgcacgttt gtcgggatga ccagactcgg aaaatatatt gcggagatgt 360
 tcctttcttc caaacagtcc aaagtcgacg tcgttctttc gttgctctgt gaaagaattc 420
 ttgacgttac gatcgttcct actcaaag 448

<210> 4594
 <211> 452
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-041-Q1-E1-G2
 <400> 4594

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 tgaacaacta aatattttct gggttgaaga tgtggaaaca tttagaacct gtcgatatca 120

taagaccagg cacttggcaa tgccaatgca catcttgcg ctcctttcgg ccttttgcaa 180
aaagagtatt cgcgatggaa tatctttcca cttctcgtcg aaaagttgct cggattcttc 240
tggtgaaagg tcccaaaacc tgaatttctt caactcgaga gacacaagtc agtgatgggc 300
ttttaaaggg tgaccgttcg ttgccactat ggaacccttg tgaaactgaa actttgcaac 360
tggaactgta gattgctcct tagtacaaga aagaattcgc aaatcccgaa cttggaatac 420
ttcctcgta tcaccagaca ctaataaatg ac 452

<210> 4595
<211> 408
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-G3

<400> 4595

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acacgagtat cgcactaaca gttgggaaga atccttggtt tttatgggtt ggcctattat 120
caacgatggg acccttaatg cctcaattt ttacaagaat cagtatccca caaatatgta 180
cctgttgggg gtctttacgt ttggagagtc tttatggta gcaactattt gttctctgtt 240
tcgttcagct ggacttggcg tcactgtgtt tgacgccttt ctacttactt ccttggtatt 300
cacgagtctc actgcttatt gtttctacag taagaaggat ttctcggttc ttggaggctt 360
tttatgggct ggattgctct gtctgttcgg tgctgcaatg ataaatat 408

<210> 4596
<211> 406
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-G4

<400> 4596

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gcaccaagtc caacgaaaaa gtccaaatca cattagaaca agatgaagag tttcggaag 120
cttttacgtt attcgacaca gacggggatg gtaatatgag taaaggaact cggtagcgtg 180
gtccgttcct tgggtcagag tcctacggaa gcagagttga aagaaatgat agcagaagtt 240

gacaaggatg gaaacggcac catcgacttt caagagtttc tcgacttgat gtccaggcat 300
atgagacaag cagatacaga cgaagagata cgtgaagcgt tcaaagtttt cgataaggat 360
ggaaacgggtt atatttctgc cgcagagctg cgtcatgtta tgacca 406

<210> 4597
<211> 373
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-041-Q1-E1-G5
<400> 4597

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tccgcacatg gcattgtagt atttgacta actcgaactt acgtcagatt tccggttcac 180
acatggtcgc cagtagcaga acagctggag gtgacacact tttggtgaag tagcgacaca 240
agcaaatgga atctgaatcg aagacacagg gggagtctac gaaaccttgt agtgttttgt 300
taattatcta cggcagcctc ataatgcaat tcgtacatga gtacgttatt aagagtcaat 360
ccaggaatga ctc 373

<210> 4598
<211> 415
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-041-Q1-E1-G6
<400> 4598

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gtatacgaaa gatgacgacg acaggtggta agaaagcgta gcagcgattt gttcgtgtat 120
acaaaacttt ttacgcgaca ctaggaagaa aacgtactcg aaatgtggaa gacgactagg 180
ggatggacaa agatatagat atatatctat atatatgtag acatgtgttt attggatgggt 240
ttgttttttg tgtctatfff taatctgtct ttatagagcg ataaagaata cgaaccaacg 300
tcaaactaaa aaaaaaacat aaaatgaata cataaataaa aatcaatcca gaaaaaacat 360
caaaaaaaaa cctataggta atgtacacaa gtgaaaaggg gcggacgctc tacag 415

<210> 4599
 <211> 454
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-041-Q1-E1-G7

 <400> 4599

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 ctaccagctc gggaatctac tgcagaaaaa gttgttcggg aaactggggg agaatacata 180
 cctccataca atcacgtaga tattattgca ggccaagcaa cggttgcagc agaactattg 240
 gagcaagttc ctgatttaga tgccattatt gtcctatcg gcggtggagg actcgtgtct 300
 ggcacgtgta ttgccgcaaa gcatttttct tcccgttgta aggttttggc agcagaacct 360
 gcaggtgcgg atgatgcgaa gcggtccttg gaaagtgggtg tccttattcc acagacaaac 420
 cctaaaacta ttgccgatgg acttttaaca agtt 454

<210> 4600
 <211> 435
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-041-Q1-E1-G9

 <400> 4600

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 ctttatcgag tcacagtgcg tcttttcccc taatctttct ttttcggtgt cgacgacgtc 180
 gaactaccta aaacgcaaag cagcaaagtc ccaaagtttc gactcttttt gtttctccca 240
 ctagccatat tgaaccaaag tgttttgcac cacttgccac gacaacgatt ggttcactct 300
 cgtgtgtttt atcttgacaa aactcgaaga ctatttattt cttgttatgt tttagagggt 360
 tttctagagt gtgtttttgg agttgttgta cttccagtct tgggtggttg tgaatgggtc 420
 tagtgacaaa gagaa 435

<210> 4601
 <211> 462
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-041-Q1-E1-H1

<400> 4601

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 tgaaattctt tgcaataatc gggaaatctt tcgtagtaga ttatcaagtg tgtcatgtcc 180
 ttgcactatc gatgactatc agtgcgatat tggttatgaa agaaaacctg gttccacgga 240
 atgtcatcct tcctatggta ccaacgattt ttctagtcac tgtggacatt tggaaagcaa 300
 aggctacgta cttattccag gtgatacatg cgatgctaca aagggtctca atctactgcc 360
 tagtcgttca agttgcattg catattggat ccgacgtatt gtatacatcc tattttggat 420
 attaagtatt ccaatgttta tgttttctat gatgttgta ac 462

<210> 4602
 <211> 445
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-A10

<400> 4602

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 atccattttc gatatgctca attctactgt ctttgactcc tccgagtcgt cattgttcca 120
 tggaggaaat tggagagtag aagcttttgt attttctttg ttttatgcgt tttatcgccc 180
 tgaatgtgcg atatctgaag tgtatttaca agagttgatg aggaaatatac tttgttctga 240
 agtcatgatc gttcgtgcta tcgttcaaag aattgtccat ctcatgatcc aattgtccaa 300
 acatagagaa gaggagaaat ggagaagcat tgttcgatc ttgttttctg acgagtcatt 360
 tgtagagtcg ctattgaaaa cgatgtgtca ggattcatcc ttttatgacc ccaatgagca 420
 acaacaatca tctgcgagta ctttc 445

<210> 4603
 <211> 334

<212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-A11
 <400> 4603
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 aagattcaga atacgcaaat attcaggtca atatctatcc cacatgagat atgataatcg 120
 gtggtgatta caggcaagtt gccattaata tatccccaat gcagccttta caaccattt 180
 cttagaatac tatgcaaaat attgtccatc gaatactgat tcgaagtgtg ctgtacagag 240
 atgagtgtgc cactttggat ggttttggaa ggataccatc ttatatatat actcatatat 300
 gtatacatat atgtagatta ggaaggtagt gatc 334

<210> 4604
 <211> 334
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-A12
 <400> 4604
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 aactaaattg cagttttaga ttgcaaccag ccacgactaa ttatgtgcta atttataaag 120
 acaacgttca cattaaaaaa aaaaaaaaaa aaaaaacaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa aaaataaaaa aaaagaaaaa aagggggagta gagcaagagg ttagtaaggt 240
 acagaaaatg agcatggtac gtcaaaatcg tttagaaaaa atggcataca cacaattaag 300
 ttggacgtct ttttacacag tcgtgaatgg gaaa 334

<210> 4605
 <211> 446
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-A2
 <400> 4605
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 tagcaacgaa cctgtatttc gtgtatttca caagtgcac atgtgctgct ttttagaaca 120

aagaatagtt gtcttttcggg atggcctttg tatactgaaa aattccaaca gctggttgtt 180
 gttggatgct ttgcgtgata tcacaaaaca tgaaaaggac aaagaaaacc cgttcttcta 240
 tttctttgcg gtttgtgagg cgttgatgaa tttatggcga caacggatga acggcacgtt 300
 ggctggttca tcaccaccga gaaatgtatt tgctttgact tggcaacgag aacagtctct 360
 ttcccatgca caacagttgc gactcgagtt gaacgagttt tgtcgaggaa tatcttttcc 420
 tttcatgaaa agatggaaaa tgcgat 446

<210> 4606
 <211> 465
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-A4
 <400> 4606

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 ataaccctcg aagaaggact ccctcacgag actgtgacat cttcacaaga gacaaaagat 120
 gaaggcccgg aaacaaagcc aaaccgcttt gcaattactg gccacacaga ggaggaaatg 180
 gatacagagc taagcaagct tgatgacgag aacaaccggc tgcacaagaa aagattactt 240
 acttcacagg tctttggtaa ccctaaacat tttatatggg tctttgcacg gtttgcgagc 300
 atgggaggaa ttctgtatgg tattgaccag tctttgataa gtggtgctgg tatttatatg 360
 ccagttgacc tacacattga ccagaataga gaagacatgg ttactggatt tatgccactc 420
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<210> 4607
 <211> 436
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-B1
 <400> 4607

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 ttggacaatg gttgcaaaga ctgctctgag ttgcctcttt ctctctttcc ttatcgctgc 120
 cgcagttgca gccgacgtag tttcagagga gagatgggga tatgctcagc aaaccaaca 180

acagcaacag tgccaacaag tatgtaaaca gtatgcatac tatcagagtc cagtctgcac 240
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 cccaagccag tgcagtactt ataccaatc tctacatgg acctattgca gcacctacac 360
 caccactagc gtaccatccc aatgcagcaa ggccgtgact acctatactc aaacctgctg 420
 tgcttatgcc caacaa 436

<210> 4608
 <211> 441
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-B10
 <400> 4608

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 aatggaaagt acgaagaaag ctgccacggt tagatatggt tctcccaaag gcaacgggtc 120
 ggtgggacga agtcatgttc acaagtcaaa gagaaaccac ttgaaaaaca aacttgttag 180
 cttgtttttt gaacaaagtc aaatatgcaa agcagattat tggaacttgt tactgttggt 240
 ccttttagct ttcaccacaa gattctggcg tttgttttac cctgctgctg ttgtatttga 300
 tgagtttcac tttgggaagt ttgtcacttg gtacttcaaa catcagtatt atttcgacat 360
 acaccctcct ttaggaaagt taatactata tcttggtggt ttgttaggtg gatataatcc 420
 tggttttttg tatgatgcta t 441

<210> 4609
 <211> 455
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-B2
 <400> 4609

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 tggttgagac aaaacttcaa gatggtgtta gtgcttctct ttggactgtt cgtctcttcc 120
 tctacacagt tatttttagca ttctctgccca ctatcattgg cttggatgga cgtaaagcag 180
 acaacatatg gaacgacagc ttattctatg atgggaagta cattaacttt tgtgcttatt 240

ctgcctcttc tgtttagaa ggaggggacc atggagcgtg taaatatgtc atggcgttgg 300
 cgtctataag ttgattcta gtcttttct tgtggctttt tacatttgta gatgcgttgt 360
 atcctattct taccaagttt tggtttattg aattgggtat caacgtgttt caaacaatgt 420
 ggtggttggt tggagcaatt gttgtatctg caaaa 455

<210> 4610
 <211> 431
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-B3
 <400> 4610

attcacgggt cgacgcacgc gtccgaccac gcgtccgccc acgcgtccgc ccacgcgtcc 60
 gccacgcgt ccggaagtaa atagacgttt gaaaggcgtc cagtatgaaa ggagaaacga 120
 gtgtagcact gtctagtcgt ccaactcagc gaaacagcaa taactgtgaa aatgcagtaa 180
 actagcagta ggacggaaaag accccataat tcttgactag ataggtttag ggaggagaga 240
 gaatcatgaa gtagaggagg tggggtaaga gatgaaagac cactgcatga ggataaggaa 300
 tctaactgag taaggaaaat aagcttaagc tagtttggtt ggggaagtaa agcctaagaa 360
 agagtaaatt aggcaagcaa aggcattgaga gaagtataat agcagaagca tgcttgaaga 420
 aaaagaaaga g 431

<210> 4611
 <211> 451
 <212> DNA
 <213> Cyanidium caldarium
 <223> unsure at all n locations
 <223> Clone ID: LIB190-042-Q1-E1-B4
 <400> 4611

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 tggcgtcggc tattcacttc aaaatgaagt cggaanaaga cttttcgacg ctttcttttg 120
 acggcgactt tctcaaagtt tcagacctca agctgttagt ggtagaaaag cgcaagctaa 180
 attatgggga tgggtttgat ttggttatca cagatgcgca gaccaatgag gaatatgcgg 240

atgagtccac gttgattccg aagaacactt ctgtagtgat aaagagggtta ccagggcaaa 300
agccggggggg tattctttcg caacaaacgt tggcgcgag aaacgaaagg taatcggaga 360
acgatttggc gaagatcanc aacaacaaca actcgacgag tgtggaaagc tcgtctggag 420
actaaaccaa gcatggtgga aataatatca g 451

<210> 4612
<211> 450
<212> DNA
<213> Cyanidium caldarium
<223> unsure at all n locations
<223> Clone ID: LIB190-042-Q1-E1-B7
<400> 4612

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tatgtttcga gttggcctgg taaaagacgt tgcaggagtt caagtttgtg gtgctctaaa 120
aatgtgatt gctttgggtg caggcttttg tgatgcttta gaaatgggaa acaataccaa 180
atcggctctg atgagaattg gactgattga aatgcaacgg tttacaaaga aatattattc 240
taatgtgaag ttggaaacgt ttatggaaag ttgtggagtt gccgatttga ttactacttg 300
ttatggtgga aggaacagga aatgcgcaga agcctttgta agaaccaaga agtcttggga 360
agagcttgaa gaagaattac tcggggggaca aaagctgcaa gggacgacta ctgccanaga 420
cgtttatattg acttttaaaga aagacaacgt 450

<210> 4613
<211> 267
<212> DNA
<213> Cyanidium caldarium
<223> Clone ID: LIB190-042-Q1-E1-B8
<400> 4613

accacacgt ccaaccacgc gtccggttga tgatgcgttt tttcctggat gatatgtttc 60
cagttggcct gttaaaggac gttgcatgag ttcacgtttg tgggtgctcta gcatatgtgg 120
ttgcgttggg tgtcagcttt tgtgatgcgt tacacgttgg aaactgtact aagtcggttc 180
tgatgagaat tgtgctgatt gagatgctcc ggtttacagc taattattac tctaattgtg 240
cattggaaac gtttatgccg ggttggtt 267

<210> 4614
 <211> 158
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-042-Q1-E1-C1

 <400> 4614

 aatcacgggt cgacgcacgc gtccgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
 aaaaaaaaaa aaaagggagg acgcacaaaa agataaaaag gttaaataca cgtggaggcg 120
 acctcaaagg tcttctagaa tgtcacctaa attcactt 158

<210> 4615
 <211> 402
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-042-Q1-E1-C11

 <400> 4615

 tcccgggtcg acccacacgt ccaatggttg gaactggttg tgctggtaga attggttacc 60
 gagtgctgca gagactaaag ccatttaagt gtaaagaatt gctatattcg ggttatcaag 120
 ctctttctcc cgaaatggaa agcggagttg gagcgaaacg cgtaactttt gaggagttga 180
 ttgaacgctg cgatgtgac actagcaatt gtcctcatca tgacaaaaca aggaatctct 240
 tcaacaaaca agtatttgat aaagtgaagc ctggtgttta cattgtcaat actgcaagag 300
 gcgctagtgt agatcgagat gcgttggtag aagctgtgaa aagtggcaaa gtaagaggat 360
 atgcgggaga tgtttggtat cctcagccag cgcctaaaga tt 402

<210> 4616
 <211> 365
 <212> DNA
 <213> Cyanidium caldarium

 <223> Clone ID: LIB190-042-Q1-E1-C12

 <400> 4616

 ccgggtcgac ccaaactgcc gaccacgcgt ccgcccacgc gtccggtaaa ctagaatacg 60
 aagtacaacg agggaatgaa cggaagttat ggcaaaaaca gctaccatca gcatcggtag 120

cacgtgcgca ccaagctgta gagcagaata actgggtgta aaggtcagta gtagagatgt 180
 gtgaaaggta aaagataggg gagatcgatg atccgcatca agtgcagaga tcgctacaca 240
 tcagcaagaa agaataataa ggaagagaca ctagatgagg agatagtgcg tacgacgtga 300
 agcgggaatag gaaatcgtgt agtctatgca ataaactgtg gaatgtgtca gagtaagagg 360
 agtca 365

<210> 4617
 <211> 395
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-C7
 <400> 4617

ccgggtcgac ccacacgtcc aatatatcgt tgctgaggat gaagcaagtt gggaaaagtt 60
 gtggagagga aaacgcgagg tcattggata tactttggaa gcagctttac agaaaacttg 120
 tattgtggaa aaccagttga gggaaatggaa aaagaaactc gatagtctag cagacaatta 180
 ttcgttgggt acgagagcct atgatgcgag aatgtgggtca ttggacctca tcgcaactat 240
 tatgagtgtc tgttttgcag tttttggaat gttttcacia ttctttgggt aatatgtcca 300
 attgcccatt tacaatatgg gaaatgcgag tcagtattac ttttatggcg tgatgggagg 360
 tatttccgtc ggccctgtcg tcagcgtcta tttct 395

<210> 4618
 <211> 296
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-C8
 <400> 4618

tccccgggtcg acccacacgt ccaaaagatc ggagcagaca gtaaataag ttaggaaaca 60
 tatgaaatga cgcagattca aggcccgtgt attcaattta gtagcagcat ttacagaata 120
 cttgtattgg gagtcattcg atcagggaat tgaaagcgca acacggaaac ccagcacact 180
 tgtctgcaat cggtgaagagg ggtgaatgac gctagttaat cgccattaga cctcaaccct 240
 tacatcacca gtatcgggtt gcacgggtgt cgaatgatct tactgttcag tgacaa 296

<210> 4619
 <211> 388
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-D1
 <400> 4619

attcacgggt cgacgcacgc gtccgaccac ggcgtccgcc acgcgtccgg tttgccaata 60
 aagacgacaa cggagggtgca atgcccattt attggttgga gatccaagcg tcgtattctg 120
 ccaacgtaca aaggataagc gtccatagca actatatatg gcacttgag ctacaatgta 180
 tgcaatgtag tgaaaaaacc ggggtggattg cagtcgatcc tttgcaggaa acgacaagag 240
 tgaaaagtgg gatttgtcac gtattgtttc actgtcgact atgtaaaaga caagggtacgg 300
 tgacattgtt ggatgaacct caccaatatg acaagaatga agagtttcaa aagtttgcca 360
 gttttgattg tcgaggactc gagccaat 388

<210> 4620
 <211> 409
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-D10
 <400> 4620

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 tgacgattga acgaagccat gcctcccaag gcacctccct acaagataaa aggagttatc 120
 gaatactttg tttcaccgaa tgaacagaag ctattttcag acttgacgga tataaaactt 180
 ctgacgacga aagctagaag aaagggtggcg gataatctcc cttccatgct ccccggtatt 240
 ctactgtttt gtggttggtta ctttggtggc tattatgtgc atgagcagag gatcaagagt 300
 gctcgggtgt aggcgtcggg tgggtgtgtt gtgttggtgt gtgtatgaaa caatgacatg 360
 aaaaccatgc tttattctaa aaaacacgtg gatgccacat gtttagattg 409

<210> 4621
 <211> 369
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-D12

<400> 4621

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cctgtagaag acagatccga ctacctgtgt gccatggcaa gttaagggag tagatcacga 120
aaccacgctg aaggcaatcc tagtgagaga atgagtcatt tgaatgacat caccacgct 180
agtgatcaag cacagtgtca cagctcatac ctagggcaca ctgtctcaac gactgaacca 240
ggagacgtcg aacatccagc aggtcagctc tctcgctacg atcgaaacgc aactccactt 300
ctaagcaatc tgattctcct ccaacagcgt taccgctcat ccgttcaagc gatatacctag 360
aagtacgtc 369

<210> 4622

<211> 406

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-D2

<400> 4622

cggtccagaa ttcaccgggt cgacgcacgc gtccgaacgc aaatacggga aagcagtagg 60
agaacaaaga gaaacgacaa cactgagtat caggacaaat agagggagta gatgaagaca 120
gcaagatcag cgaactatga gtaggaaaag agtacagtgc atcgaaacat gacactagct 180
gcagaagaga gtgtaaagcg cgtacctttt gcagaatgtc ccagccagtg caatacgaag 240
cacgacgaaa gatgaaagaa gtagccatgt cagacccgaa gccacttgat cctatgctgt 300
ccacgcgata taatgctgaa ccagtatctg tggcaacaga tttggaagag atggcataat 360
gagtgaatg ccaatcatga ctagtataa ctcgtactcc tcgaaa 406

<210> 4623

<211> 416

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-D4

<400> 4623

gtccagaatt caccgggtcga cgcacgcgtc cgaccacgcg tccgccacg cgtccgattt 60

tctgcctgcg ggtgtgtgtg tctgtgtgtg tgtgtggtg tggttattgg gatgtcagac 120
tctgcaacac ctaccaaacc tttgattggt aagaaagctg ttgtaactgg aggaaacaag 180
ggtattggag aagctatatc tcttgctcta gcagaaaaag gagcggatat agcaattatt 240
gctcgagata cggattcagc tcaaaacgtg atcaagaaag tgcgttcaga gagacgtttc 300
tgtaaggttt accccgcgga tctcaatgac tctgcttggt tgaggaaagc agcaaaggag 360
atactggagg atatggggag agtagatatt ctagtcaata atgcgggtat gtctca 416

<210> 4624
<211> 441
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-D7

<400> 4624

ccgggtcgac ccaaacgtcc gactcaacga cgtaatgaga ctactcatt ttctctttgt 60
tttgtctttt gtagctgttt tcctcgtagc tcatgcagtt cccgttggag aagatgcatt 120
cagtttcagt cagacttttg gaaatgcttc tgcttcaggc aacgcctctg ttattccagc 180
tacaaccaag atccccaagt tagaagtaac tagtagtgcc tcatcaaagg acaatggaaa 240
agcagctcaa gtagactttg cagattactc aaagggatat ccttcgccta gctattttta 300
cgctccttct tacacatcct atgtggaatt tcctcaatat ccctcctatc catcatggcc 360
ttcttttaat gagcagcctg cctttggtgg cttcgatccc aatgcagagt ttggagagtc 420
tgaaattttc gtgtgatggg a 441

<210> 4625
<211> 435
<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-D9

<400> 4625

gggtcgaccc aaacgtccga ctgcctgtat cttaacagga tggattggcg aatcagaaaa 60
tagtttgca aaaaatgttc gtgtctcact ccgtacctgc aagaaactta cccgcttttg 120
cacgtaactt ttccaatgtc tgtctctcga ggagtggctt gagaggggga tgtttacgaa 180

atgtgaaagt tttcaaccac aaacgacctg caaggttggt atctacgaaa atgagaggag 240
 gcgaccatga aaggagagaa cttagtcgtc ctatgcgtac gcttgattcc gctttcgatg 300
 aacttttagc ttttgcgcaa gatccctggg ccatgtttcg ctctccatgg agtctgtcgc 360
 ccagaagtat ggcagtagac acgtggatgc ctctgtttga cttgggtggat aaggaagatg 420
 gcttttatgc atacg 435

<210> 4626
 <211> 125
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-E1
 <400> 4626

tttttttttt tttttttttt taaatggaag caaccctaact ttattattca aagtcattac 60
 accgcggaag gctccatcga taagcatcta taagtccgtt cgaggagcat tttttcgcat 120
 ccagt 125

<210> 4627
 <211> 372
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-E10
 <400> 4627

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 ggctcgaagc caagtttagag acaattagag ggaagcagtt ttgttatgag tcttcttttt 120
 tgctacacta caagaacatg ggtgaaaaca gaagtgtaac gtccgaaagg tcaaacgaaa 180
 agcagataaa tgcgttgaat gaaacacgaa aacagcatat ggccagaaga gcttttggga 240
 aggcatctcg aatttacaac atagcaatcg agttgggccc gaacaatgcc ttattgtaca 300
 gtaaccgctc cgctgcctac ttcaacttga gaaattttga agcggccttg gaagatgctc 360
 taaaaggcgt tc 372

<210> 4628
 <211> 457

<212> DNA
<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-E3

<400> 4628

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tctggcagtg gcttatcgta agaacgagct ggaggaacaa atgttgctca atttgcataa 120
gaaacactgg agcagaggct taaaagtgac agactttgaa gagcgagctg agaaaaatga 180
aaaggcagtt cagtccatgt tggagttggc aaagagttat agcaaaatgt tggaagaaga 240
acgtcaaatg acaaaggaac aggctgcaat tgcaaagtgt ggcaaagtag acgcaaagaa 300
acggttggag caggatgtga cggagttgat gagtaagaat attgatcagt gtttaagttc 360
catgttagat tctgttgttt tccaacaagc ttgaccttca acagttgtag tgtcctttaa 420
atagecggttt ggtagtgtgt cctaatagtaa agaatgt 457

<210> 4629
<211> 430
<212> DNA
<213> Cyanidium caldarium

<223> unsure at all n locations
<223> Clone ID: LIB190-042-Q1-E1-E7

<400> 4629

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tagcatcgac gagtactagt agaagagtag gtgcaaggaa aaccaggaag agtaccggga 120
ccaatgtggt gacgacaaca tcgagtcctat cggaaaagga agaaaaaaga caacaactgg 180
caatgatgga tgaaccacga aaattgcgca gtcgagatgc catcaagcgg ccacgagaa 240
tgacgacgac gacgatgacg agtactacta ccgcaagcaa tagttgagaa tctccatcat 300
acatacacat agagagagag agagagatac gttcatcaca tgtgtgtgta tggtggcatt 360
tgtgtcgaag tagatatagc ctcgatagan aagtaaatga aatgagcagc aacacaactt 420
anaataacac 430

<210> 4630
<211> 419
<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-E9

<400> 4630

cccggtcga cccacacgtc cgcaaatgcg gagtgactaa ctatcttgat tgctgcttac 60

aggaagcttt ggaatggcga ctcccaactc agaagatgac agcgtttgga aagaaatatt 120

ccactcattc accagcagat ggtcgcaaag gctaaaacgt cttccagagc ttccttcgta 180

tattagaagt ggtgctgctg gggagtcggt gacaagaaag ttccatgact ggaaagaggc 240

agttgtggca aatccttatc ctgctgcagc ttatgtggtg acttttgggtg ttctgtatgg 300

gaggcttcta tggacaataa gagtgtcaag aatagaagag gctaggatca gacgtacttt 360

tcaggaattg aaggatcgac aagctcgaga aaaagcaata caacagcttc gtgaacaaa 419

<210> 4631

<211> 373

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F1

<400> 4631

cggctctagaa ttcacggggtc gacgcacgcg tccgagtga tcttcagctt tccatgtttc 60

aagttttgca aggtacaata gtattttgga tattttcctt gattggtttc tttgtttggt 120

actttttggt tgttcaagtc caaaaaacta tttattgaga gaaaggccgg tcgacgatgg 180

cgaaggaatg gatgtatggt tgggtgaagaa gagagagaga ggctttgtgc agatatttag 240

atggagtctg ttacaagaaa gaatattctg gaactagaag aaagatttgg agatagttct 300

tcttctagtg acgaagaaac aaatactatt ggaaacgttc ccattgagtg gtataaagac 360

ttgtcacacg ttg 373

<210> 4632

<211> 383

<212> DNA

<213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F10

<400> 4632

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 taattaagta gaagatacga atgcgttcca caacaggatg aataaaatat gtctcgaaga 120
 agccaaagac atggccagct atgttcatgt cttgttgtct cagatgcaga gccattttcg 180
 aactatggaa gacactctac taggcagaat tgcagatatg ggtagtcata tagtcgaact 240
 ggagaagtcc atcgttgaga tgattgaaca gtctggagtg aaggatggcg cagtaataaa 300
 gtctgggtgta gttactacga gaagtcgtgg ggagtaattg cgtaagttgt agtacgttga 360
 ctttctacca gcatcgctcg tac 383

<210> 4633
 <211> 443
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F11

<400> 4633

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 gtctccgtca tgtcttctctg tctccagca gtttcgttct ttggttatat tgggtgctgca 120
 agtgcccttg tattttcaaa tttgggtgca gcttatggta cagcaaagag tgggtgttggc 180
 gttgcttcga tgggtgttat gagaccggaa catgttatgc gatctataat tctgtagta 240
 atggctgggtg tgctaggtat ctacggtctc atcgttgctg ttagtttggg tggacaaatt 300
 gccgaaacga actatccata ttttcttggc tttgcacacc ttgcttctgg actagcaaac 360
 ggtctcagcg gtctggcagc tggaatttgt attggtatac ttggcgacgc atgcgtccga 420
 gctacatctc atcagccaaa act 443

<210> 4634
 <211> 326
 <212> DNA
 <213> Cyanidium caldarium

<223> Clone ID: LIB190-042-Q1-E1-F12

<400> 4634

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 atctaagttc agttcacggg ccatcgattt caacgtctc actgggaaaa ccttggtgtt 120

acccaaggga attgccttgc aatagatccg ccttgcacca gctggcggtta taccaaataa 180
 gtccgcacgc atcacccttc ccaaccgttg ctgggcctaa tgggcaaata ggacgcacct 240
 attaccggcc caaaaagcgc cgcggttgta atggttaagc gcatcgtcac tgtcacagtt 300
 gctaacgccc gacggcccg accttt 326

<210> 4635
 <211> 420
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-F2
 <400> 4635

ggtctagaat tcacgggtcg acgcacgcgt ccgaccacgc gtccgggtcga tgttgggcgg 60
 tgctcgagtt gtgttttcag gaaaggctgg aactttgttc gttccacggg aatatgggtta 120
 tgttattttc gttgttatat ttacacttt cactactgttt tggaaagaag tcaagggttg 180
 gcaggcacga aaacgtttca acgtaaagta tccgaccatg tatgagaaca aggaggacag 240
 tcactttaac tgctaccaac gtgctcatca gaacactctg gagaagacac caacctttct 300
 tgttcttata ttgttaggag gaatatatgc tccattttc tgttcgatat gtggactgat 360
 ttggtgcttt ggtcgcatc agtatgcttt gggttattac tcaggtgacc caaaaaagag 420

<210> 4636
 <211> 411
 <212> DNA
 <213> Cyanidium caldarium
 <223> Clone ID: LIB190-042-Q1-E1-F3
 <400> 4636

attaacgggt cgacgcacgc gtccgacgac aattgtgcaa tgttgaaaca accggtgacg 60
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